

IN SENATE OF THE UNITED STATES.

AUGUST 12, 1848.

Submitted, and ordered to be printed.

Mr. BREESE made the following

REPORT:

[To accompany bill S. No. 338.]

The Committee on Public Lands, to whom was referred bill No. 338, "to authorize the draining of the Ever Glades, in the State of Florida, by said State, and to grant the same to said State for that purpose;" and to which was also referred the report of the Secretary of the Treasury, respecting said measure, and the accompanying documents, report:

That from the data submitted to the committee, and accompanying the report of the Secretary of the Treasury, the committee has been induced to believe the measure proposed by this bill should be adopted.

The region proposed to be granted to the State of Florida, to enable that State to effect the desired improvement, is now nearly or quite valueless to the United States; and will so remain until reclaimed, by draining it by means of canals. More than six-sevenths of it is yet unsurveyed, and it is officially reported by the surveyor general of Florida, that "*it cannot be surveyed without first being drained*;" the correctness of which report is corroborated by all the evidence adduced on the subject. The portion that has been surveyed, is also reported as being of little worth; and that the fact that but *one-half section*, out of 590,132 acres that has been surveyed in sections, has been sold, fully proves the correctness of such statement. The suggested improvement, it is believed, may make some of these surveyed lands saleable.

The cost of the proposed canals, it is estimated, will be about half a million of dollars.

The quantity of lands capable of being reclaimed and rendered fit for cultivation, it is estimated, is about *one million of acres*. But on this point, and also as to the anticipated enhanced value of the other lands, (besides those now covered with water within the region proposed to be granted to the State of Florida,) to be effected by the proposed work, no certain calculation can be made, based upon data obtained from mere explorations, or even from surveys of the most particular character. The true consequences

and results can only be ascertained by the experiment being actually made.

The propriety of the federal government undertaking this work, even if it could do so with profit, is doubted by the committee.

It is believed that the work suggested can, for the reasons given in the documents appended to this report, and the cogeny of which must be conceded by every practical mind, be best undertaken and completed by the State of Florida, or by associations of individuals under its authority. The improvements can, in such case, be made to effect not merely the draining of those now covered with water, but the enhancement of the value and *price* of the other public lands, and also the promotion of important local interests of that region in many respects, and at the same time the interests of the Union, generally, (beyond the pecuniary interest in these lands,) may be advanced. The proposed canals being made channels of communication by vessels across the Peninsula from the Atlantic to the Gulf waters, thus avoiding the perilous reefs further south, is a consideration of no trifling moment to the navigating interests of the Union.

The bill referred to the committee provides for a grant to the State of Florida, with such view, of all the lands below a specified line of the public surveys, near the northern end of Lake Okechobee, with certain reservations; and it contains stipulations and conditions which (if the State accepts the grant with such conditions) will, it is believed, insure the completion of the work as far as it can be effected.

By the proposed improvement, if successfully carried out, it is believed the United States will derive great immediate pecuniary benefit by the draining of *several hundred thousand acres*, (outside of the boundary of the district proposed to be granted to Florida,) being the bottom lands on the *Kissime* river, and its tributaries, now valueless by reason of their annual overflow. The committee agree with the Commissioner of the Land Office, that this is a full consideration for the grant made by the bill of the *alternate* sections of the *surveyed* lands below the northern boundary of the proposed grant, even if no other existed.

The committee will not enlarge on other important results beneficial to the whole Union, which may be anticipated, if the proposed work is successfully carried out. They are fully set forth in the documents annexed to the report of the Secretary of the Treasury, being the opinions of some of the most intelligent citizens of the United States, and well qualified to judge correctly on such subjects, and several of whom have personal knowledge of the region in question.

Nor do the committee deem it necessary to comment on the particular details of the proposed bill. These details have received the approval of the Secretary of the Treasury, and of the Commissioner of the General Land Office, and they are deemed proper and suitable for the protection of the respective rights and the promotion of the respective interests of the federal government, and

of the State of Florida, with reference to the territory included in the proposed grant, and of those citizens who may become residents within its boundaries, and of all others; and they authorize, in the judgment of the committee, the measures best calculated to insure the successful accomplishment of the work, if it can be accomplished at all.

The committee, therefore, report the bill without amendment, and recommend its passage.

Report of Secretary of Treasury to Senate.

TREASURY DEPARTMENT,
August 10, 1848.

SIR: In compliance with the resolution of the Senate of the 9th instant, requiring "that the Secretary of the Treasury be directed to communicate to the Senate any information in his department as to the practicability of reclaiming the Ever Glades in the State of Florida, or as to the expediency of ceding them to the said State for that purpose; and his opinion as to the best mode and means of accomplishing such object," I have the honor to transmit to the Senate a copy of the report of Buckingham Smith, esq., a gentleman of character and intelligence, who was, in 1847, employed by this department to examine the land-offices in Florida; and directed, also, to make a *reconnaissance* of the Ever Glades as a part of the public lands, for the purpose of ascertaining the practicability and expediency of draining them, &c.; and appended to which are sundry documents and letters furnishing information on the same subject. Annexed hereto are also copies of the instructions of this department to Mr. Smith and to Lieut. Martin, commanding the revenue cutter Wolcott, who assisted Mr. Smith in his examinations; and also copies of the application to the department, in compliance with which the examinations were directed.

Herewith, likewise, is submitted a letter from the Commissioner of the General Land Office to this department, in reply to inquiries as to the quantity of public lands at the southern end of the Florida peninsula; specifying the quantity of lands that have been surveyed, and those that are generally covered with water, and those that are only *occasionally* covered with water, and those that are capable of being surveyed, or are too valueless for survey.

The papers transmitted contain all the information on the files of this department, on the subject mentioned in said resolution.

As to the practicability of draining the Ever Glades, these data would seem to indicate that it is practicable, and at an expense probably not exceeding \$500,000; as estimated by Mr. Smith, in his report. Of the value of the lands reclaimed by such draining, I am unable to give any decided opinion. Whether they will be worth the expense of the work, is questioned by intelligent men acquainted with the country; and, on the other hand, equally intelligent men have expressed the opinion, which would seem most probable, that their value will far exceed the cost of draining the

Glades and adjoining swamps. The test of experience can alone solve the doubt. These lands are, however, utterly worthless to the government, at this time, as stated in the letter of the Commissioner of the General Land Office.

The Committee on Public Lands of the Senate have transmitted to me a copy of the bill now before said committee, to cede said lands to the State of Florida, for the purpose of effecting their draining, and requested my opinion as to its provisions. Upon a perusal of that bill, it seems to me that its provisions are well calculated to insure the accomplishment of the object, and by means more eligible than if attempted by the federal government. The cession to the State of these lands, and of all others within it of similar character, would seem to be the most proper and advantageous disposition that can be made of them.

I have the honor to be, very respectfully, your obedient servant,

R. J. WALKER,
Secretary of the Treasury.

To the PRESIDENT OF THE SENATE.

Letter of Commissioner of General Land Office to Secretary of Treasury.

GENERAL LAND OFFICE,
August 10, 1848.

SIR: In reply to your inquiries of this office as to any information in its possession respecting the Ever Glades in the State of Florida, and the lands in said State, below the line dividing townships 36 and 37, south of the base line in said State, I have the honor to state:

That the name "*Ever Glades*" designates that region of the peninsula of Florida lying south of Lake Okechobee, and generally covered by water from two to seven feet deep, at least for some months in every year.

That the greater part of the peninsula below this line, between townships 36 and 37, and which it is proposed, by the bill now before the Committee of Public Lands of the Senate, (which bill has been submitted to me by Messrs. Westcott and Cabell of said State,) to be ceded to the State of Florida, being unsurveyed, and there not being any *nautical* surveys of the *western coast* below Tampa in this office, an approximate estimate only can be made of the area of the peninsula and keys, including the lands and interior waters south of said line, and excluding the islands and keys south and east of Cape Sable. It is supposed, however, that such area may be stated at about 7,800,000 acres of land and water.

Of this aggregate area, it is estimated that there is always covered with water about 4,300,000 acres.

This estimate includes rivers, lagoons, sounds, and Lake Okechobee, and other lakes south of said line, that it is not proposed to drain and cannot be drained. It includes also the swamps and all

those portions of country comprising parts of the region called the Ever Glades; the greater part of which it is not supposed can be reclaimed.

Of the aggregate before stated, it is estimated there are about one million of acres that are only *occasionally* covered with water, *i. e.* for some months during and after the rainy seasons in each year; much of which, however, on the eastern and southern margins of the Glades, are represented as valueless until the Glades are drained, in consequence of such annual overflow, and of which also a considerable portion it is not anticipated will ever be made valuable by such draining.

Of the remaining 2,500,000 acres, the quantity of 1,000,000 acres has been surveyed, (about 590,682 into sections and 409,318 by the exterior lines of townships,) mostly of very inferior quality, judging from the small quantity (only 360 acres) sold since a large portion of them were brought into market. The residue of said lands, being 1,500,000 acres, are represented as poor and valueless generally, and most of them probably not worth the expense of surveying.

No sufficient data, on which to base a correct statement of the quantity of lands within said limits legally subject to *patent* under the acts for the armed occupation and settlement of Florida, is in this office, but it is considered that sixteen thousand acres will certainly cover all such claims that can be legally established.

Twenty-three thousand and three acres have been granted by special acts of Congress to Doct. H. Perrine and his widow and heirs, within said limits, for the cultivation of tropical fruits and plants, and which grant is allowed by law to be located in separate sections, and the reasonable presumption is, that they have located the choicest lands in that part of the country.

There are, it is believed, several claims under Spanish grants within said limits, amounting to many thousand acres; but inasmuch as they have not all yet been definitely confirmed, and the surveys thereof finally concluded, this office is without certain data whereon to base a precise statement of the aggregate quantity of such claims. The great Alagon claim covers two-thirds of the entire district proposed to be ceded to the State of Florida, and extends much higher up (north) than the line before specified. This claim is in suit, but it is not supposed there is the slightest danger of the claimants succeeding in such suit.

The project of draining the Ever Glades, if successful, may perhaps reclaim *for cultivation*, within the limits of the proposed grant to Florida, about a *million of acres* of these lands, now covered with water; some *continually*, and the residue *occasionally* only. It cannot be anticipated to *reclaim* but a *part* of the *Ever Glades*, a *part* of the Atseenahoofa or Big Cypress swamp, a *part* of the Halpatiokee swamp, and the skirt of poor lands on the margin of the Glades, covered with water some months of every year, and which is very barren. Much of the subaqueous lands will still remain inundated; and no one can expect that the parts that are so drained can all be made susceptible of cultivation.

The entire peninsula south of the northern line of the proposed grant to Florida, whether occasionally covered with water or not subject to overflow, is, *at this time*, utterly worthless to the United States for any purpose whatever. Colonel Robert Butler, the surveyor general of that State, in his official report, made October 2, 1847, says: "I now ask your attention to the Ever Glades, which *cannot be surveyed without first being drained*;" and that officer recommends the cession of a moiety of that region to the State of Florida, for the purpose of having them reclaimed.

Draining the Glades, as suggested, will, it is supposed, still leave large rivers, lakes, ponds, and channels in the Glades filled with water; and, as before observed, many of the lands drained will also remain valueless. But the results of the proposed work can only be ascertained by actual experiment.

The great depth of Lake Okechobee forbids the idea of draining it entirely; and, indeed, I learn from Mr. Smith's report, it is contemplated only to decrease its waters but a few feet, leaving it of sufficient depth to be navigated by vessels that may be able to navigate the canals from said lake to the gulf and to the Atlantic. As before observed, the lagoons, bays, sounds, and rivers, within the said district, will not be affected by the contemplated work.

The bill before the Committee on Public Lands of the Senate grants to the State of Florida alternate sections of the surveyed lands below said line dividing townships 36 and 37—the nearest township line to the north end of Lake Okechobee. In consideration of the fact before adverted to, that the value of these lands, now esteemed of but little amount, will be perhaps enhanced by the proposed improvement to the legal *minimum* price of the public lands, and, in consideration also of the reclaiming of several hundred thousand acres of bottom land on the banks of the Kissimmee river and its tributaries outside and north of the proposed grant, and the benefit of which will enure solely and directly to the federal treasury, it is deemed that this provision is equitable and just.

In my annual report I had the honor to express my convictions as to the policy of the federal government with respect to all such lands as those proposed to be ceded, situate in any of the States, and I had the honor of advancing the principles I conceived to be sound on that subject, and I am gratified to find that the proposed bill sustains what I then deemed it my duty to say.

I transmit with this letter the map of this region, prepared at this office for Mr. Smith, which gives a better idea of it than can be given by any description.

I have the honor to remain, with great respect, your obedient servant,

RICHARD M. YOUNG,
Commissioner.

Hon. ROBERT J. WALKER,
Secretary of the Treasury.

IN SENATE OF THE UNITED STATES.

AUGUST 1, 1848.

Agreeably to notice, Mr. WESTCOTT asked and obtained leave to bring in the following bill : which was read twice, and referred to the Committee on Public Lands.

AUGUST 12, 1848.

Reported without amendment, and accompanied by a Report, [S. No. 242.]

A BILL to authorize the draining of the Ever Glades, in the State of Florida, by said State, and to grant the same to said State for that purpose.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and hereby is, granted to the State of Florida and its assignees, all the lands, lakes, and water-courses, with the appurtenances, situated in said State, and south of the line of the public land surveys therein, running due east from the Gulf of Mexico to the Atlantic ocean, being the line dividing townships 36 and 37 south, in said State; said grant to include the islands or keys adjacent to the coast north of Cape Sable, and not to include any such islands or keys that are south and east of said cape; and said grant is made to said State upon the following conditions, to be accepted by said State, by act of the legislature thereof, or this grant to be void, viz:

1st. The said State shall, on or before the 1st day of January, 1851, cause to be commenced, under the direction of a competent engineer, to be appointed under authority of a law of said State, the construction of drains and canals, to be sufficient, if practicable, for draining the Ever Glades aforesaid, and for reclaiming the sub-aqueous land thereof, and for decreasing the waters of the lake Okechobee, and draining and reclaiming the swamps and low lands contiguous thereto, within said boundaries; and drains and canals for draining and reclaiming the swamps and low lands between the Ever Glades, and between said lake and the Atlantic and gulf coasts and the coasts of the straits of Florida, and so that, if practicable, a communication may be made by such canals, for vessels, between the gulf and the Atlantic waters; and said State shall cause said works to be completed and finished within ten years from the time the same shall be commenced as aforesaid.

2d. That said State shall not sell, alien, transfer, pledge, or mortgage, or otherwise dispose of said lands, or any part thereof, or any of the rights or privileges derived from this grant, except to effect the full and faithful fulfilment of said condition above stated; and the entire avails and proceeds of any disposition thereof, or any part thereof, made by said State, shall be exclusively and sacredly appropriated to the completion of said work.

3d. No sale of any of said lands shall be made for a less price than one dollar and a quarter per acre, (and this restriction shall extend to lands within said boundaries not reclaimed as well as other lands,) until said works are fully completed.

4th. Until the President of the United States shall authorize the same in writing, no entry or encroachment shall be made or allowed by said State, into or upon the district reserved for the Seminole Indians yet remaining in Florida, part of which is within said boundaries; and for any delay occasioned to the commencement or completion of said work by the withholding of such authority, the period stipulated for such commencement and completion in said first condition shall be extended a corresponding term.

5th. One thirty-sixth part of all said lands within said boundaries shall be reserved by said State, and appropriated to the use of common schools for the inhabitants of said lands, in lieu of the sixteenth section now so appropriated in each township of the public lands in said State; the said one thirty-sixth portion to be designated in such mode and manner as the legislature of said State may, by law, direct.

6th. Of the public lands south of said line, and surveys of which have been completed and approved prior to the passage of this act, one-half is excepted from this grant; the same to be reserved by the Secretary of the Treasury for the United States, in alternate sections; and when there are fractional sections, one-half of such fraction to be reserved for the United States, the State, however, to have the right of way for said works through said lands. And the President of the United States may, at any time within two years from the passage of this act, reserve for the United States, at such points within said grant as may be reported, after examination and survey by a proper officer, to be advisable, such tracts not exceeding half a section at each point, as may be necessary for light-houses, forts, docks, arsenals, navy yards, or other public works within said boundaries, to be used by the United States for such public works, but upon relinquishment of such reservations, to revert to said State, conformably to this act. And this act shall in no wise affect rights acquired under any Spanish grant, heretofore or hereafter confirmed to any of said lands, or any rights acquired under any public sale by the United States, or by private entry of any of said lands, or under any donation or other grant by the United States, or under the pre-emption acts, or under the acts respecting the armed occupation and settlement of Florida.

7th. Any residue or surplus of the avails, or proceeds, of said sales of said lands, after defraying the expenses of said works stipulated to be completed in said first condition, as aforesaid, shall be devoted by the legislature of said State exclusively to the purposes of education within said territory hereby granted; the principal of such residue to be invested as the legislature of said State may by law direct, as a permanent perpetual fund, and the interest thereon only to be expended as aforesaid.

8th. No tolls or charges shall be exacted, for passing through

any of said canals, from *vessels* or *boats* of the United States, or in the service of the United States, or laden exclusively with public stores, munitions of war, or other freight of the United States, or the United States mails, or transporting, as aforesaid, troops in the service of the United States, through any of said canals; nor shall tolls or charges be exacted for any freight or mails of the United States, or for such troops; but such reasonable tolls may be charged and collected from other vessels, and freight, and persons, as said legislature may by law allow, to be applied to keeping the said works in repair.

9th. *Be it further enacted*, That the surveys of the said lands by said State shall conform, as nearly as practicable, to the form and plan of the surveys by the United States of public lands in said States.

REPORT OF BUCKINGHAM SMITH, ESQ.

WASHINGTON CITY, June 1, 1848.

HON. R. J. WALKER,
Secretary of the Treasury.

SIR: Having made a report to you upon so much of the duties assigned to me by your instructions of the 13th of June, 1847, as related to the land offices of Florida, and other subjects, I have now the honor to submit the report of *my Reconnoissance of the Ever Glades*, excepted from my former reports, to enable me to obtain additional information deemed important.

The absence of the Receiver of public moneys from Saint Augustine, on my arrival there, caused me to defer the examination of the land offices at Tallahassee and Newnansville. The United States revenue cutter Wolcott, Lieutenant Martin commanding, which was to take me to the southern part of Florida and Saint Marks, arrived at Saint Augustine on the 10th day of August, 1847.

I had procured previously and examined such books, maps, and charts, and obtained all the information within my power, as to that portion of the peninsula below 28° of north latitude; and as soon after the arrival of the cutter as a proper boat could be procured by the commander, as to enable me to go into the Ever Glades, we sailed from Cape Florida and Biscayno bay, where we arrived on the 29th day of August, 1847.

Lieutenant Martin had made a detailed report of the employment of his vessel and crew, while in fulfilment of his orders to aid me in the performance of my duties, which has already been submitted to you. I desire to express my acknowledgments for his assiduous efforts to render me every assistance.

The accounts touching the interior of the southern portions of Florida lead to the opinion that, although Spanish officers may have had some tolerably accurate general information with respect to portions of it, yet until within a few years much certain and exact knowledge has not been had by the public on the subject. Melendez, the first Adelantado of Florida, of that name, had become so confident of the connexion of the interior waters of the peninsula from north to south, that, being at Havana in the year 1567, he sent a vessel to ascend the river Saint Johns, (after touching at Saint Augustine,) while he should attempt to meet her with a fleet of seven sail by way of a river of Biscayno bay and Lake "Mayoca."

Probably explorations of the Ever Glades were made at an early day both by private adventurers and others acting under the authority of the government; and it is not unlikely that official surveys, partial at least, were made of them, but which, in conformity to the accustomed policy of Spain, are buried in its archives. I had hoped that the United States consul, at Havana, in compliance with the request made of him, with your sanction, would have been

able to communicate information of value. If such examinations were made, I can hardly doubt that records of them may be found in the public offices of Cuba and Mexico, the Floridas being at different times parts of those Intendencies.

By delineations upon old maps, the Peninsula, below the 28th degree of north latitude, appears to be cut up by large rivers, extensive ponds, lagoons, and lakes, communicating with each other and the gulf of Mexico on the western, and the straits of Florida on the eastern side. These descriptions suggest the existence of channels for vessels of considerable size from the head waters of the rivers emptying into the gulf, to the head waters of the rivers emptying into the straits and Atlantic; and some of the old books speak of an interior body of deep fresh water as the common source of all these rivers, and which lake is usually called Mayaco or Serrape. "They tell me," says (*Escalante*) a writer of one of the earliest accounts, in speaking of the Miami river, "that it runs through fifteen leagues of country, and rises out of *another* lake of fresh water, which is frequented by the Indians, but which I have never seen; they pretend that it forms a part of the Lake Mayaimi," by which is evidently intended the Ever Glades.

The region below the lake is usually represented as a collection of innumerable islands in a vast lagoon, partly swamp and partly prairie, interspersed by channels like net work, which are marked, including the Ever Glades from Lake Oke-cho-bee to "*Punta de Tancha*," otherwise Cape Sable. From the Spaniards it received the name of "*Laguna del Espiritu Santo*." "*Tegeste*," or "*Tegesthon*," is given apparently at a later day as the name of the territory as extending across the Peninsula. The adventurers under Narvaez, and also under De Soto, indulged some romantic hopes of discovering in these countries valuable pearls; and, indeed, the first writers, Spanish, Portuguese, and French, concur in their statements of finding pearls among the Indians in Florida, and some "as large as filberts" were, it is said, obtained by the soldiers under one of those bold invaders. This is certainly remarkable, when it is considered that the Indians of later times have never been seen to wear them as ornaments, nor have pearls been found in Florida.

The Amazura, (Little Amazon,) now called the Withlacooche, which was once supposed to receive its waters from a common source with the St. John's river, it has been ascertained, heads in the region contiguous to Ocala, and is separated by a ridge of several miles in width from the head waters of the Oclawahaw. Similar errors as to other of the gulf rivers uniting in their sources with the St. John's, as well as the existence of a natural channel for anything but boats or canoes, across the Peninsula, have long since been corrected.

There is a faint tradition that the draining of the Ever Glades was contemplated, and, indeed, undertaken a century or more since, by either the Spanish government or an association of Spanish subjects in Cuba, though abandoned, perhaps, on account of difficulties with the Peninsula Indians. Some of the old maps seem to

indicate something like cuts or canals from the Ever Glades to the waters emptying into the Gulf of Mexico; and during the late war with the Seminoles, a canal was found on the northeastern border of Lake Flirt, leading to the prairie of Lake Hiokpoche, and in the direction of Lake Oke-cho-bee, a work, it is supposed, too considerable to have been undertaken by the Indians of Florida.

During the twenty-one years that Florida was a British province, from 1763 to 1784, surveys of the eastern coast were made by William Gerard De Brahm, esq., an engineer officer of reputation in the service of that government, and who was its "surveyor general for the southern district of North America." The official reports of these surveys, and others of Georgia and Carolina, have never been fully published, and, indeed, it has not been generally known in this country how far they had been perfected. De Brahm's observations alluded to in the book printed in 1775, on the Floridas, by *Bernard Romans*, induced inquiries for information to aid me, and as to documents in the British colonial archives, but no complete official reports were found. Some of the maps of his surveys, in manuscript, with notes of great interest and value, have been obtained recently by Peter Force, esq., of this city, who has permitted copies to be taken of those relating to the lower end of the peninsula, for my use. He has also in his unequalled library of American history, the very rare copper-plate charts of Romans, published to accompany the work before mentioned. Further investigation resulted in ascertaining that materials in the handwriting of De Brahm, chiefly "historiographical and hydrographical," from which his reports were made, were in the possession of individuals in England; and within a few weeks past, they have been purchased by Harvard University, and now belong to the institution. The Hon. Mr. Westcott, of the Senate, sought to obtain the manuscripts for a short time from the University for the use of the library of Congress, and for reference by me; and a request being made by the Treasury Department, the corporation of the University, with great liberality, permitted them to be brought to Washington. They can be copied for the use of the government, under the stipulation that they shall not be published without the permission of the University. It will be found they contain useful information relating to South Carolina, Georgia, and the Floridas, at the period they were written; and it is believed a map made by him, upon an official survey, of the sources of the Saint Mary's river, (which he refers to in his work,) if it can be procured, will conclusively settle the disputed question between the United States and the State of Florida, on the one side, and the State of Georgia on the other, as to the eastern terminus of the boundary line between these States.

The work of the elder Bartram, who was appointed in 1763 "Botanist to the King," and who, by order of the government, made an official exploration of a part of East Florida, contains useful observations on the policy of liberal expenditures by the government to encourage settlements, and for the development of the resources of the provinces; and, though a small volume,

gives other hints of value on practical subjects. From the works written during the possession of the Floridas by Great Britain, it is evident that the best informed, then, knew little of the interior of the Ever Glades. Some of the old publications as to the Floridas will, however, in other respects, bear a favorable comparison with those of recent date.

Postponing to a subsequent part of this report a reference to some of the historical accounts of this interesting region, from the discovery of Florida, in 1512, to its cession to Great Britain by Spain in 1763, which may be useful, as showing from its former value how important it can now be made, I proceed to state the result of my own explorations of the Ever Glades under your instructions, furnishing also notes of all the material parts of my journal which it will be found to verify the facts I shall have stated, and the deductions made from them.

The Ever Glades extend from the southern margin of Lake Okechobee some ninety miles towards Cape Sable, the southern extremity of the peninsula of Florida, and are in width from thirty to fifty miles. They lie in a vast basin of lime rock. Their waters are entirely fresh, varying from one to six feet in depth. Their usual level is, I am satisfied, more than twelve feet above that of the waters of the straits of Florida and of the Atlantic ocean, but of course not so great above the Gulf of Mexico. As the Ever Glades extend southwardly from Lake Okechobee, they gradually decline, and their waters move in the same course. They have their origin in the copious rains which fall in that latitude during the autumn and fall, and in the overflow of Lake Okechobee through swamps between it and the Ever Glades.

Lake Okechobee is the reservoir of the waters of the Kissimee river, which rises up the peninsula some hundred and odd miles, and of streams of minor extent, flowing into the lake from the country contiguous to it. It is of fresh water, said to be deep, and its average diameter is about thirty miles. It contains a few islands, each of them several acres in extent. Its location is given on the annexed map, prepared at the General Land Office.

The rim of the "Basin" is of lime rock. The waters of the *glades* are at different distances from the coast of the gulf, of the straits, and of the ocean. On the eastern and southern sides of the peninsula, they are within from two to ten miles of the shores of the straits and ocean, while on the western side they are from ten to fifty miles from the gulf.

On the southern and eastern sides, the lands between the Basin and the coast are generally rocky, though tracts are found of limited extent that could be made fertile. Many small rivers or creeks empty into the bays and sounds on the southern and eastern sides. In wet seasons, when the basin is full, its waters find outlets over the low places in the rim, and form rivulets running into the necks of the rivers; and there are instances where the waters of the Glades find subterranean passages to the sea.

On the eastern side, commencing at Cape Sable, are North creek, Miami river, Little river, Arch creek, River Ratones, New river

Snook creek, and Hillsboro river, as is indicated on the map accompanying this report. Farther north are the Rivers Loca-Hatchee and San Lucia, rising westwardly from their mouths, the former rising a few miles from Lake Okechobee and outside the somewhat elevated lands, that separate the lake from the extensive swamp of Halpatiokee, which supplies the waters of both rivers.

On the western side of the peninsula the coast is somewhat different. A cluster of low keys or mangrove islands, (quite as correctly delineated on the map as they can be without an expensive and useless survey,) the channels between which contain salt water, and the islands being of mud, upon which mangrove trees are thickly growing, extend from the bay of Ponz de Leon, or Chatham, into White Water bay, and inwardly farther north from about five to twenty-five miles from the gulf. The waters of the Ever Glades fall into these channels, by many small rivulets running over the margin of the basin into them, and in times of very high water in the Glades, wide sheets of shallow depth are found rippling slowly through the dense shrubbery growing on the margin, which, in this region, is apparently of a more level surface than at other points.

The western rim of the Ever Glades, farther northward, deflects from the gulf coast, eastwardly, until it comes near to Lake Okechobee and the country contiguous to the Caloosa-Hatchee, where it is due east from that coast about fifty miles. Between it and the coast on the west is the Atseenahoofa, or Big Cypress swamp, which contains several hundred thousand acres of land, now useless to civilized man for any purpose. It can only be made valuable by draining the Ever Glades. Its waters are chiefly supplied from them by passage ways, shallow, deep in mud, and often obstructed by dense thickets of shrubbery and vines, and by large trees. From the character of its connexion with the Glades in many places, it may be considered a part of them. Several streams running into the gulf have their sources in this swamp.

Commencing at Cape Sable and passing up the western coast, are Shark river, Harney river, Chitto-Hatchee, Delaware or Gallivans river, the two Caximbas rivers, Corkscrew river, and Otsego river; the two last emptying into Otsego bay. They will be found described on the map with sufficient accuracy to enable a correct opinion to be formed respecting their connexion with the Glades, and the use that can be made of them in draining the Glades, and the Big Cypress swamp.

Farther north, the Caloosa-Hatchee finds its source some ninety miles from its mouth in the low lands outside of the western margin of Lake Okechobee, and in the swamp at the north end of the Ever Glades. It is, in fact, connected by sloughs of shallow depth with both the lake and the glades at different points, and receives supplies of water from both. It is supplied also by minor streams that drain the neighboring country, and by Lake Flirt and Lake Hiokpochee. The map indicates the old canal before spoken of, to connect the waters of Lake Flirt and Lake Okechobee.

The margin of the region of the Ever Glades nearest to the Ca-

loosa-Hatchee and Lake Okechobee, as before described, is interspersed with sloughs and swamps, through which the waters of all, in wet seasons, mingle by shallow passages. More eastwardly, the waters of Lake Okechobee, and of the Glades, are said to be in like manner connected with the Loca-Hatchee, which receives also some of the surplus waters of the Halpatiokee swamp, which extends up the coast some fifty miles, and being from twelve to fifteen miles in breadth. The sources of the San Lucia are also towards the northernmost extremity of that swamp.

The geology of the southern portion of the peninsula of Florida is similar to that of the sea-coasts of Georgia and South Carolina. Oolitic lime-rock, filled with the shells and corals of species that still exist, forms the great geological feature of the country. The rock is porous, and susceptible of easy excavation. Exposure to air hardens it and renders it useful for building purposes. On the eastern side of the peninsula this rock shows itself through the thin coating of vegetable matter, or mud or sand, that ordinarily covers it; and it is also in detached pieces of different sizes, scattered above the ground. It contributes to the fertility of the soil; and being from its porous nature long retentive of moisture, affords sustenance to trees and plants in seasons of drought. The rim of the Ever Glades is generally of this character. Along the eastern verge of the glades, and between them and the sea, there are spots of wet and black prairie land; there are also spots grown up in pine trees, the roots of which are imbedded in a dark soil of vegetable mould lodged in the crevices and fissures of the rock; and there are tracts of what is called "dry hammock," covered with trees of various kinds growing in the same manner. Such land is more valuable for cultivation than any other part of the rim.

The same rock forms the bottoms of the openings through the rim of the Ever Glades to an unknown depth. It composes the floor of Biscayno bay, of the other bays and sounds, and of the rivers along the coasts on both sides of the peninsula, and also of the basin of the Ever Glades. It belongs to the post pliocene formation of Lyell. The fossils are not very obviously identical with those in the rock of the Georgia and Carolina sea coast; but this arises from the effects of the different latitudes of the two regions upon similar living animals, of which the fossils are the remains.

The rise of the tide at the mouth of the Miami, as marked by the wearing of the soft rock, is two feet; at the mouth of Little river, about fifteen inches, and on the western side of the peninsula, at the Mangrove islands, its rise was much greater than at any other place on the coast visited by me. At the mouth of the Caloosa-Hatchee it is about three feet.

The rise of the land from the sea coast towards the Glades is manifest from the appearance of the banks of the rivers. At the mouth of the Miami the banks show an elevation of from two to three feet above the water at the *mouth* of the river, to twelve feet or more at the *head* of the river. At this last point, within the distance of a hundred and fifty yards, the rise is six feet.

Places exist where the rocky rim approaches the coast at a greater elevation than at the Miami, and on a level with the margin of the Glades, and at such places it is precipitous, twelve or fourteen feet. This is the case a few miles to the north of the Miami. The vaulted rock across Arch creek is two miles from the mouth, and above and below it the waters rush with great force through perpendicular rocks that, for a hundred and fifty yards, overhang them on both sides the height of a dozen feet, and where the stream is about fifteen yards in width.

Inside the Basin, near the heads of the rivers of the eastern coast, there are covers or indentations in the shore of the Glades about two miles in depth. The nearest point touches the margin of the rim where the waters of the Glades approach the heads of the rivers, and where these waters are about a foot in depth. There are within the coves, channels, converging to such point, and in which the waters are from $1\frac{1}{2}$ to $2\frac{1}{2}$ feet in depth. The shallow places between them are covered with mud and rank saw grass. There are also sinks or holes of water several feet deep. Near the head of Little river these sinks or holes have six feet or more water, and similar depressions near to the head of the Miami have eleven feet. Immediately east of them, and on the line where the waters of the Glades fall into the heads of the rivers, over rocky passages of not more than fifteen or twenty yards wide, and from fifty to one hundred and fifty yards in length, the waters run through rapids scarcely a foot in depth. The fall of these rapids is, as before stated, upwards of six feet, and drains or canals could easily be cut at these points. But to draw off four or five feet of the water in the Glades, such drains must extend several miles from the river into the basin. I refer to the map as exhibiting all the data on this point that I have obtained.

The distance in a strait line from the navigable waters of the Caloosa-Hatchee to the Lake Okechobee, it is estimated, does not exceed fifteen miles, and, on the eastern side, it is believed that canals of similar distance will connect the waters of the lake with those of the Loca Hatchee of more than six feet depth, and, with like waters in the San Lucia, and as to all three, it is certain the fall is sufficient for such canals.

To reclaim the Ever Glades and the Atseenahoofa and Hal-patiokee swamps, and the low lands on the margin of the Kissimee river and its tributaries, and the other rivers emptying into Lake Okechobee, this lake must be tapped by such canals running into the Caloosa-Hatchee on the one side, and into the Loca-Hatchee or San Lucia, or both, on the other, and cuts must also be made from the streams on both sides of the peninsula into the Glades. Besides, after the height of the waters in the Glades should be decreased, even as much as five feet, there will probably be a necessity for several drains through the Glades, and those swamps, by which the waters accumulating from the rains may be conducted to the ocean or gulf.

That the level of the waters of the Ever Glades is several feet above the level of the waters outside the peninsula is demonstrated

to any intelligent man who visits that region, not merely by the facts I have stated, but he must observe that, on the eastern side, the effect of the tides is not perceived a short distance up from the mouths of the streams, and that above the influence of the tides there are, when the waters are high in the Glades, continued rapid currents of fresh water from them. I am informed, that when the waters in the Glades decrease during the dry season, the beds of these currents near the Glades become dry. The elevation from the sea to the top of the rim that encompasses the Glades, and which is but little above the surface of the waters in the Basin, is as certain as if it had been ascertained with leveling instruments in the hands of an engineer. The general opinion on this point is fortified by that of several gentlemen, some of them officers of the navy and army, expressed in letters which I have appended to this report, and in fact by one of these letters I am informed that "a line of levels was run from the ocean to the Glades at the mouth of the Miami," by a scientific officer of the army, in 1840 or 1841, which proves the correctness of that opinion beyond all doubt. It is not probable that the elevation of the waters of Lake Okechobee is much higher than that of the waters in the basin of the Glades; nor can the waters of the Atlantic rivers opposite the lake be much lower than the streams farther south; but it is not in my judgment necessary that the fact should be otherwise, to establish the practicability of draining the Ever Glades. If the modes herein suggested are not pursued, some other, devised by a skilful engineer, can be adopted. The difference of the levels that I have stated (twelve feet) of the respective waters, is sufficient to enable the draining to be effected. But it is believed this difference is understated. It is the opinion of one of the most distinguished and intelligent military officers of the United States that the waters of the Glade, and of the lake, are much higher above the level of the sea.* The distance from the lake to the eastern coast of the peninsula is less than forty miles in a direct line, and not exceeding fifteen miles to navigable waters emptying into the ocean; and if the judgment of that officer be correct, the favorable success of the undertaking cannot be questioned.

With respect to the cost of the undertaking suggested, I frankly admit my inability to afford you any reliable estimates except those given by the letters hereto appended. The maximum of probable necessary expenditure, there estimated, is \$300,000. I presume, under any circumstances creating the necessity of an augmentation of this amount, that \$500,000 would, beyond question, defray all outlay necessary for the successful accomplishment of the work. On this subject I must refer to those whose professional experience renders them more competent to decide on such matters than I pretend to be.

In answer to the inquiry, what are the benefits that would result

* See General Jesup's letter in appendix.

to the federal government, from its undertaking and completing such work, and whether they would be corresponding in value to the probable amount of expenditure? I can only submit the information obtained by me in my explorations of parts of the country, and gathered from historical and other sources, of the character and capabilities of that region, and the opinions I have formed upon that information. I am by no means confident of the correctness of some of these opinions, though concurred in by gentlemen more competent to judge than myself.

The early history of the southern part of the peninsula of Florida shows that when discovered by Ponz de Leon in 1512, and for a long time after, it was numerously peopled by Indians, living in towns under the dominion of one principal chief, and that they were of an intrepid and enterprising character, possessing the same qualities, in war, that have recently rendered the Seminoles such troublesome foes. They engaged in agriculture to a small extent, and their excursions to the islands and keys, among the perilous reefs, and along the coasts of Florida, and across the straits to the Lucayos, and Cuba, caused them to acquire nautical knowledge and experience superior to that of most other North American Indians.

Ponz de Leon, in sailing along the coast, near Biscayno bay, saw a town, and he held intercourse with some of the Indians at the islands near the Caloosa-Hatchee river on the western coast. Narvaez landed in South Florida in 1528, and marched up the peninsula and to the west, encountering and fighting while in Florida numerous bands of ferocious savages. De Soto invaded Florida in 1539, debarking his troops near Tampa, where he met with like resistance as did Narvaez.

Within half a century after the discovery of Florida, and the consequent commencement of the navigation of the adjacent seas, the passage of the straits of Florida had proved disastrous to many vessels. Those on board of them who escaped death from the sea, were taken captive by the Indians on the islands or coasts and made slaves.

One of these, *Escalante*, a Spaniard, remained in captivity to the Indians from the age of thirteen to thirty years. His short, but interesting, relation has been published only in French, as translated by Ternaux. His description of the country then, corresponding with its present appearance, is evidence of its authenticity. The preservation in his narrative of many of the words used by the savages, is interesting to those who value such information.

It seems that the southernmost part of Florida was then called the country of Calos, the name of a cacique who ruled over many chiefs, whose countries extended some distance on the gulf side, included the Ever Glades and part of the coast on the straits, and also the Florida islands and keys south, then known as the "Martyr islands," and also, at least, a portion of the Lucayo or Bahamas, across the straits. At the mouth of the river emptying into the western side of the straits of Florida was a town called Tocobago, at which, when first visited by the whites, there were fifteen hun-

dred Indians. The Indians of Tocobago, and those of Calos, were hostile to each other, though obliged by the Spaniards to live in peace.

On the Miami river, when first discovered, was an Indian town. Nearly opposite, on the eastern shore of Raton key, was once a village, probably the same Ponz saw in sailing down the coast. A Spanish settlement, and Catholic establishment, were made at an early period near this river, and it is probable the missionaries introduced white families among the other Indian settlements near it. The river Miami was called, by the Calos Indians, "Mayaimi," and by the English, "Garbrand." It does not appear that the English ever established any settlements upon or near it. The name of Espiritu Santo was given by the Spaniards to Tampa bay, and to the waters of the Ever Glades, and the islands in them, some of which, it is believed, had Spanish settlers, were called "*Cayos del Espiritu Santo*." The name Ever Glades is doubtless of English gift, and probably was originally "River Glades." The Seminoles call the same region "Pah-hay-o-ke" or "Grass Water," and De Brahm denominates it Tegesthe or Tegesthon, as I have before stated, though Escalante assigns the name "Tequesta," to a place near the mouth of the Miami, and the same thing was probably intended on a map in Herrera, and does not greatly differ from the place assigned to it by Barcia.

The Indian towns of the Glades, when first discovered, contained each about forty persons. Calos was sovereign over about fifty towns. The names of at least half of them are given by Escalante. Two towns, of which names are given, were on the Lucayos. Tampa is the original Indian name of a village yet on the western coast.

Calos was an hereditary king, and his power descended to his son, who had visited Spain, and professed christianity.

The Indians on the southern part of the peninsula spoke different languages, and were frequently at war with each other. In the policy pursued by the Spanish government with respect to the Indians, religious missions were established among them, and Catholic priests, accompanied by families of whites, were sent to reside among them as teachers to effect their conversion to christianity, to advance their civilization, and to improve their social condition. This policy was adopted as to both the provinces. San Mateo, San Pedro, San Luis, San Felasco, (Francisco,) and other like names on Spanish maps, designate the location of some of these missions in East and West Florida. This system was, for a time, beneficial to both whites and Indians. The condition of the latter in Florida, was improved by the efforts of the missionaries. The savages were restrained from wars with each other and with the whites. They were taught to observe the dictates of humanity and hospitality towards the unfortunate who were wrecked on their coast. They were induced to devote their time to agriculture and the raising of stock, and encouraged to commence a traffic in peltries, birds, skins, and ambergris with Havana, which promised to be of

great advantage to them. The whites under this policy made settlements, and several religious houses were erected in the interior. On an engraved map of Florida, in the library of Harvard University, there is a designation of a church surmounted by a cross, near the margin of Lake Okechobee, on the east side; and our troops, in traversing that region in pursuit of the Seminoles a few years ago, discovered a large artificial mound in the same vicinity, which may have been its foundation. It is said that on one of the islands in that lake a cannon yet remains, carried thither by the Spaniards, and that a large bell, and other indications of a church having once been erected there, can be seen.

The irruptions of the numerous warlike tribes of Indians from the regions of Georgia and Carolina, the difficulties among the different tribes of Florida Indians, and between them and the Spaniards, and which resulted in the murder of some missionaries, broke up the interior settlements; and some years before the acquisition of the province, in 1763, by Great Britain, those in East Florida, except near St. Augustine, were chiefly abandoned. Military stations were, however, kept up at different places. An Englishman who was wrecked on the southern coast in 1696, in a printed account of his shipwreck, says, that on his journey up the peninsula, on the east side, he found several Spanish soldiers at different points from San Lucia inlet to Mantanzas fort, twenty miles south of St. Augustine. Fourteen Franciscan friars had, while the policy of the missionary settlements was pursued with vigor, been sent among the Indians of South Florida.

The missionaries, however, complained that the Indians had become no better Christians than if they had never been baptised. But the traffic of the Indians with Cuba became important. Barcia, who writes of the state of things as in 1698, says that the traffic between the southern coast of Florida was increasing daily, and that boats arrived at Havana from the keys in twenty-four hours. *He states that the traffic in the month of March, 1698, was worth \$17,000, though it was decreased by the effect of the capture of Carthagena, and by the non-arrival, for three years, of the galleons for Spain at Havana, on the markets of that place.*

The Calos Indians, after the destruction of the missionaries, soon relapsed into their former condition; and, before the middle of the last century, they had been forced by Indians from the north to abandon the country. After a protracted struggle for their homes, the last of them fled to Cayo Hueso, or Bone Key, (now called Key West,) and, finally, in a few years, sought refuge in Cuba.

The Indians that succeeded them in the occupation of the southern part of the peninsula, were of different tribes of the upper part of the peninsula, and of the regions of Georgia and Alabama, and were called Seminoles, or fugitives, and they had negro slaves. Havana was captured from Spain by the English under Lord Albemarle, in 1762. It was exchanged for the Floridas in 1763, and the Floridas were retroceded to Spain in 1784. The traffic of the Florida Indians with Havana continued, and to the articles formerly carried thither, were added fish and turtle, caught in large quan-

tities on the coast, in exchange for which they received supplies of fire arms, ammunition, calicoes, and other articles they most desired. Small fishing smacks were engaged in this business, commenced by Spanish fishermen, mostly residing on the Florida keys, or coasts, where they had "Ranches," and by whom the Indians were employed, often on board the vessels. Occasionally, a large pirogue, or canoe, manned entirely by Indians and their slaves, could be seen running, in fair weather, across from the keys to Havana, laden with articles for sale, or barter, in that market.

English wrecking vessels from the Bahamas, for many years prior to the cession of the Floridas to the United States in 1821, made the Florida reefs and coasts their cruising grounds, carrying the property saved into Nassau, N. P., for adjudication of the salvage. At this time the Bahamians opened an intercourse with the Florida Indians, and employed some of them to fish and catch turtle for their vessels. The acquisition by the United States, however, of the Floridas, and the sending a naval force to Key West soon afterwards, broke up this intercourse. But the provision of the 15th article of the treaty of cession in favor of Spanish vessels trading to the Floridas for twelve years after its ratification, favored the continuance of that between the Indians and Spaniards, and even after the time stipulated in that article had expired, it was carried on to nearly as considerable an extent as before. It is not doubted that, by this intercourse, during the late Seminole war, the savages obtained supplies of essential aid to them in the contest.

Had the uninterrupted possession of the Floridas and of Cuba continued in Spain, and had she been permitted to pursue her humane and peaceful course with respect to the Indians, it may be believed that long ere this, South Florida would have displayed, in the advanced civilization of the savages, and in the settlement of that region by whites, its consequent improvement, and the beneficial results of such policy. But Spain was defeated in her efforts by the circumstances I have alluded to, and it is believed chiefly through the instrumentality of England. It is not questioned by those best acquainted with the history of this country, that most of the troubles of the Spanish Floridians with the Indians of the provinces, as well as with those beyond them, were caused by English instigation; as, in later times, Woodbine and Nichols, Arbuthnot and Ambrister, excited the same savages to outrages on our southern frontiers. Great Britain holding the Bahamas, (which, for nearly an hundred miles along the Florida coast and keys, are but sixty miles distant,) she was enabled to cause Spain, as she now causes us, much trouble, by an unscrupulous resort to means of such character. The policy of Great Britain during the twenty-one years it held the provinces, (from 1763 to 1784,) was very different from that pursued by Spain, and its effect was to set the country back. That policy was a disregard of the advancement in civilization of the aborigines, and in fact it looked more to their extinction by wars among themselves. The intolerant course pursued with respect to the Catholics of East Florida by the English, during the time they possessed it, resulted also in great injury to

its prosperity. The unfortunate results were then foreseen and condemned by many. The author of a book, entitled "The Present State of Great Britain and North America," published in London in 1667, urges the government to supply the Florida Indians with agricultural implements, "instead of fire-arms," as a measure that would insure the cultivation by them of the country, and their being made "serviceable" to Great Britain, instead of being, as he states they were, "a perpetual annoyance."

While writing this report, I have before me an authentic copy of a grant for 10,000 acres of land in East Florida, made in 1767 by the English governor, which contains stipulations invidious as to Catholic settlers, and inconsistent with the pledges of Great Britain to Spain.

Romans, who wrote in 1775, portrays the bad effects of the policy of the English towards the Catholics, and in giving grants of large tracts of land to non-residents, and with respect to the Indians.

From the blighting effects of English policy the Floridas had not recovered during the time succeeding the retrocession to Spain by England, and before they were transferred to the United States.

One of the first measures adopted by the government of the United States after the acquisition of the Floridas, in 1821, has been the prolific source of evil. In fine, it may be regarded as the primary source of the Seminole war, and all its attendant ruinous effects upon the country. I allude to the arrangement by which the Tallahassee, Miccosookie, and Sampala Indians, of Middle Florida, and the Alachua Indians, and the Seminoles of the upper part of the peninsula, were all, in 1823, assigned to the region south of Micanopy. This measure effectually prevented the settlement of the coast, and of the interior of South Florida, and it consolidated the savages, and placed them in a position most exposed to outward pernicious influences, and, as the result has proved, most defensible against us in case of hostilities. Had they been assigned to the western part of the Territory, nearer a dense white population, it is conceived their ultimate removal west of the Mississippi could probably have been effected without the great delay, vast expense, and bloodshed that ensued.

It would seem that one object of Spain, in endeavoring to form settlements in South Florida, was to prevent its occupation by any other nation, that might, from such position, injure her commerce. A Spanish governor of Florida, in 1740, represents to the captain general of Cuba that Great Britain meditated the invasion of the province, and that her object was thereby to acquire a position from which she could command the floating wealth of Spain passing along its coast. One of the earliest Spanish writers advises the building of a fort at Biscayno bay, to afford protection to Spanish commerce and relief to ships in extremity, and suggests that the expenses should be borne by Cuba, Mexico, and Peru, then colonies of Spain.

Great Britain, illiberal as was her policy in other respects, while in possession of the Floridas, indicated an intention to adopt measures to avert the numerous disasters by wrecks on the reef and

coasts, and to afford relief to the shipwrecked. It may be remarked, however, that this is an illustration of the truth that, in most governments, measures with reference to distant colonies or sections at the extremities, can be effected more readily if the benefit directly enures to the parent government, or to sections of the country other than those so remotely situated, though professedly they may be for the benefit of the latter. Surveys were made between 1763 and 1784 by De Brahm, Des Barres and Gould, under the orders of the government. The elder Bartram, as Botanist in America to the king, made an exploration of part of East Florida, under official orders; but these were the most important measures of the British government relating to the province. De Brahm, in his MS. work, before referred to, recommends the erection of two structures, one on the eastern and the other on the western side of the peninsula, about the latitude of Cape Florida, which, he says, should be supplied with cannon; should be large enough to accommodate several hundred persons, and should each have a sloop and barge appurtenant to it. He calls these structures "Pharuses," and says of them, in his report to the king:

"These Pharuses, with the excellent appellations of GEORGE and CHARLOTTE, would eternalize the glory of those royal authors, who have stretched out parental hands to facilitate the hitherto dangerous and inevitable navigation of that dreadful promontory, and terminate your majesty's conquest of that country, which sets the western bounds of the Atlantic ocean."

These "Pharuses" were never built.

This recital of some of the leading incidents of the history of South Florida, if useful for no other purpose, will, I presume, satisfy all, that whatever may be the latent and dormant resources of this region; however great the capability of its being advantageously improved, and however valuable it may be made by the enterprise, energy and industry of the American agriculturist, if encouraged, or even given a fair chance, by the government; yet, hitherto, no proper opportunity has been offered for the development of those resources and capabilities. Whilst in the possession of the savages; even when under the dominion of the Spaniards, who possessed little agricultural enterprise, and whose attention was directed elsewhere;* during the short period it was in the hands of the English; suffering not merely from neglect, but pressed down by the most iniquitous policy; from its discovery by Ponz de Leon to the present day, with but brief exceptions, the theatre of savage war, and bloodshed, and desolation; in the eighty years preceding its acquisition by the United States, twice changing masters, owners, inhabitants and policy; for some time the resort of the rovers of the sea, or the little less scrupulous cruisers of the many different flags which the revolutions of the present century occasioned; and, when acquired by the United States, assigned as a kind of prison bounds for the Seminoles they failed to remove or subdue; it would have been wondrous, indeed, had it become more important, in any respect, than it is now generally re-

* See note (c.)

garded. The vicissitudes of its history are a cogent answer to the query, "If South Florida is such a valuable region, why has not the discovery been made long since, and why is its settlement and progress so much behind other sections of the Union?"

Since the Floridas were acquired by the United States, but little attention has been paid to South Florida by the federal government. No work of improvement for its specific benefit was undertaken while it was part of a "*Territory*," when no constitutional difficulty could be interposed. Nothing, has, as yet, been projected to be paid for out of the federal treasury, except for the benefit of the commercial interests of other sections of the confederacy. Light-houses have been erected at different points on the eastern coasts. The light-house at Cape Florida was burned by the Indians. One of its occupants escaped in an extraordinary manner, and another was murdered; but the house has recently been rebuilt. Light-ships have been placed at some points on the reef, and light-houses at Sand Key, Key West, and on one of the Tortugas islands. But, excepting a donation of land to Doctor Perrine, hereinafter mentioned, little has been done to effect the settlement of the keys, or of the coasts, or of the interior of south Florida, by a white population; and, on the contrary, the measures adopted tend to retard it. The whole number of whites, at this time, on the peninsula, below the northern end of the everglades, does not exceed fifty! At Key West there is a population, perhaps, of upwards of two thousand souls, and there are occasional settlements on different keys; though the sweeping reservation of all of them below Viper Key, made in September, 1845, ostensibly for military purposes, and the consequent exclusion of settlers from the benefits of the pre-emption laws, and the previous exclusion of all the keys from the provisions of the acts for the armed occupation of Florida, (by departmental construction,) has prevented any new settlements, and broken up many that had been made.

During the Seminole war, the frequent excursions of the hostile savages from the peninsula to the adjacent keys; the murder of Doctor Crews, the United States revenue inspector, at Charlotte harbor, in 1836; that of Captain Whalton, of the Carysfort light-ship, at Key Largo, in June, 1837; the destruction, by them, of the beautiful village of Indian Key, and the murder of Doctor Perrine there, in August, 1840; and other outrages on the coasts and keys, by the savages, caused most of the settlers to fly to Key West, or entirely abandon the country. The location of the Seminoles yet remaining in Florida with the chiefs Sam Jones and Bowlegs, on the southwestern part of the peninsula, deters the return of former settlers, and the coming in of new ones. It is not probable that these Indians will be induced, for some years hence, to join their nation on the other side of the Mississippi. One of the most effectual means to induce them to do so, would be the settlement of those portions of the peninsula, not within their "reservation" or "bounds," by a white population. The danger attending detached settlements, of few persons, will prevent this; and unless some hundreds of hardy settlers go thither, in a body,

the country will not, for many years, be occupied by very few human beings besides these Indians. Especially will this be the case when, if they should go there, they are to be denied, as heretofore, all mail facilities, and become cut off from everything like association with civilized man, unless obtained by a voyage of some days to Key West, or to the Havana, or of some hundreds of miles up the coast.

Extensive fortifications for the protection of the vast commerce of the southwestern, western and eastern States, flowing in and out of the gulf, have been commenced at Key West, and at the Tortugas; the first distant about fifty, and the latter about one hundred miles from Cape Sable. When completed, armed, and garrisoned properly, they will be, in time of war, the most important points of defence and attack, against a maritime enemy, that exist on the entire coast of the Union. They will give us the control of the gulf, and of the straits of Florida, and aid us to command, with our navy, the Caribbean sea.

It requires little intelligence to perceive how greatly the value of the measures adopted for the protection and safety of the immense commerce referred to, passing through the straits of Florida, will be enhanced by the settlement of the keys and coasts, with a white population. How much more efficient will be these fortifications, in time of war, by there being such a population close in their rear, from which they can be garrisoned expeditiously, and by whom supplies can be furnished, must be manifest to all. Such population would, also, add to the security of the whole coast of the gulf, and of the south Atlantic coast, and of the interior of Florida; and if experience should prove that it could not greatly augment the agricultural exports of the State, still, for the reasons suggested, it is important to Florida, as well as to the Union, that early settlements of South Florida should be encouraged. It should not be forgotten, also, that such population will, from its locality, necessarily acquire nautical skill and experience in navigating the dangerous reefs and coasts of that region, while pursuing the employment of fishing, and carrying their agricultural products to market. Inured to the climate, such population would occasion South Florida to be looked to as that nursery of *southern* seaman, now so much desired for southern commerce in time of peace, and for the defence of the south in time of war.

I have adverted to the settlement, by a white population, of the keys and coasts of South Florida, as a measure of importance, in tending to diminish the numerous disasters, and heavy losses, continually occurring, by vessels being wrecked on the reef or coast, while navigating the gulf, or passing along the straits. An authentic statement, printed in 1846, of the wrecks in the years '44 and '45 is appended hereto. A like statement, for the year 1846, was laid before the U. S. Senate, February 3d, 1847, and printed by its order, and it is to be found in vol. 3, Sen. Doc., 2d session, 29th Congress, document No. 110. These statements show that the large amount of \$3,086,800 of property was wrecked, or sustained damage, within the three years mentioned, upon these dangerous

reefs and coasts; and that the vessels were of different nations, though mostly of the United States, and of the eastern States! The business of "wrecking" or cruising along the reefs and coasts to look out for and assist vessels that have been wrecked, or that are in distress, is carried on by a number of vessels from 20 to 80 tons, of the best kind for such service; being generally superior in the qualities of sailing and of safety. They are usually manned by from 8 to 25 hardy, fearless and skilful seamen, mostly from the eastern States. None are allowed to cruise for such purpose unless previously licensed, according to the act of Congress of February 23, 1847, (taken from a similar law in force previously,) granted by the judge of the United States district court, at Key West, who has authority to revoke such license, for embezzlement, or remissness of duty, or other misconduct of those on board the vessel to which it has been granted. Property saved is carried into Key West for the adjudication of the salvage, before the federal judge, sitting in admiralty; at which place most of the insurance companies of our northern cities have a resident agent, who attends to their interests. The decree made by the court is subject to an appeal to the Supreme Court of the United States. The amount of salvage decreed in the three years, of which the statements have been furnished, before referred to, was \$271,296 18; averaging less than *nine* per cent. on the value of the property wrecked, or in distress. That the settlement of the keys and coasts would, in many ways, decrease the dangers of the reef, and of the navigation of the straits; that it would enable many lives, and much property, now lost, to be saved, no one can doubt. More extensive and more accurate knowledge would thereby be generally acquired of the reefs and coasts, and of their continual changes; and the superior facility of obtaining pilots and other aid, that would be afforded by such settlements, would be valuable safeguards.

But one of the most important considerations connected with such settlements is, that they would be an auxiliary in rendering the highly valuable fisheries on the coasts, and in the waters of South Florida, still more valuable. Since the expiration of the term of twelve years of the privilege to Spanish vessels trading to Florida, before mentioned, as granted by the 15th article of the treaty of 1819, these fisheries have become of consequence to our citizens. The average annual value of the fish taken on the Florida coasts, and in the waters of the State, and sold in Cuba, though under onerous restrictions in that island, (being a *private monopoly*, bought of the local government,) it has been estimated, is at least \$150,000! I am not able to say this estimate is correct, but on this subject I beg leave to refer to a report made by a committee of the House of Representatives, of Florida, in 1845, and sundry documents annexed thereto, which are among the papers enclosed with this report.* The American vessels employed

* See appendix.

in this business, and their crews, are chiefly from the eastern States, and if limited agricultural employment could be combined with that of fishing, both could be carried on more comfortably and profitably.

Those engaged in it would be more independent. Besides, it would tend to secure the benefit of the fisheries more exclusively to citizens of the United States. The smacks that carry the fish to Cuba are obliged to procure a *Spanish* license, at high cost. The strict prohibition, by State laws, of all but our own citizens being engaged in the fisheries, and the *suspension*, temporarily, by our citizens from fishing, which, if they had *other employment* at certain times, could be done without loss, would soon constrain the abrogation or relaxation of the restrictions referred to.

The efforts of the British government are constantly, and have been, since the treaty of 1819 with Spain checked the encroachments of the Bahamians upon the waters of Florida, directed (at the instance of the colonial authorities of the Bahamas) to procure the allowance, by the federal government, to Bahamian smacks and Bahamians the privilege of fishing on the coasts and in the waters of South Florida. Upon the incoming of a new administration, an application has generally been formally made by the British minister at Washington, and it is represented that the favor asked is of "trifling importance." It has hitherto been refused, as the local "*Territorial*" and "*State*" authorities of Florida have always insisted that these fisheries, and the regulation of them, belong *exclusively* to them; and that the federal government has *no right* to meddle with respect to them, except in fulfilment of its duty of protecting and defending the rights of the STATE.* Since the emancipation, by the British parliament, of the slaves in the Bahamas and British West Indies, many of the Bahama smacks are manned, in whole or in part, and are occasionally commanded by colored *emancipees*, and the repeated instances of their aiding and abetting slaves in Florida to abscond to the Bahamas; the memorable cases of the Comet, Creole, Enterprise, and Encomium; and the refusal by the Bahamian government, in 1843, in violation of treaty stipulations, to yield up to justice, on the demand of the government of the United States, seven fugitive slaves, murderers and thieves, who had fled from Florida across the straits to their protection, has increased the hostility to such vessels visiting the coasts or entering the waters of the State; and any attempted interference by them, under any authority, with the occupations of wrecking or fishing, or turtling, pursued by our citizens in those waters, *will be certain to breed discontent and cause trouble*. The settlement of a white population on the keys and coasts would tend to afford security to us in this respect, and likewise diminish the facility of foreign incendiarism doing mischief amongst the slave population in any part of Florida.

* See appendix, letter of Governor Duval to Secretary of State, &c.

As to the effect, so confidently predicted by many of superior intelligence and judgment, in such matters, to myself, that the draining of the Ever Glades of four or five feet of its waters, will reclaim, for the profitable cultivation of coffee, sugar, tropical fruits, and other productions of tropical climates, large tracts of the present *sub-aqueous* soil of the basin and the lowlands of the Atseenahoofa and Halpatickee swamps; or for the successful raising of cotton, corn, rice and tobacco, the facts I may give as to the characteristics of those regions will, perhaps, be more satisfactory, than the expression of my individual opinion. Unless the effect is as has been anticipated, at least partially, most of the region south of the northern end of Lake Okechobee will remain valueless for ages to come. The borders of the Ever Glades and adjacent lands, susceptible of profitable cultivation, cannot *now* sustain any very dense or very numerous population. The acquisition of the advantages and benefits I have adverted to, as resulting to the Union from such population being there, depends, therefore, on the favorable success of the project of reclaiming the lands mentioned.

The appearance of the interior of the Ever Glades is unlike that of any region of which I have ever heard, and certainly it is, in some respects, the most remarkable on this continent.

Imagine a vast lake of fresh water, extending, in every direction, from shore to shore, beyond the reach of human vision; ordinarily unruffled by a ripple on its surface; studded with thousands of islands, of various sizes, from one-fourth of an acre to hundreds of acres in area, and which are generally covered with dense thickets of shrubbery and vines. Occasionally an island is found with lofty pines and palmettos upon it, but oftener they are without any, and not unusually a solitary majestic palmetto is seen, the only tree upon an island, as if to guide in approaching it, or as a place of signal or look-out for its former denizens. The surrounding waters, except in places that, at first, seem like channel ways, (but which are not,) are covered with the tall saw-grass, shooting up its straight and slender stem, from the shallow bottom of the lake, to the height, often, of ten feet above the surface, and covering all, but a few rods around, from your view. The water is pure and limpid, and almost imperceptibly moves, not in partial currents, but, as it seems, in a mass, silently and slowly to the southward. The bottom of the lake, at the distance of from three to six feet, is covered with a deposit of decayed vegetable substance, the accumulated product of ages, generally two or three feet in depth, on the white sand and rock that underlies it, over the entire surface of the basin. The flexible grass, bending gently to the breeze, protects the waters from its influence. Lillies and other aquatic flowers, of every variety and hue, are to be seen on every side, in pleasant contrast with the pale green of the saw-grass; and, as you draw near an island, the beauty of the scene is increased by the rich foliage and blooming flowers of the wild myrtle and the honeysuckle, and other shrubs and vines that generally adorn its shores. The profound and wild solitude of the

place; the solemn silence that pervades it, unless broken by the splashing of a paddle of the canoe or light batteau, with which only can you traverse the PAHAYOKEE, or by the voices of your "*compagnons du voyage*," add to awakened and excited curiosity feelings bordering on awe. No human being, civilized or savage, inhabits the secluded interior of the glades. The Seminoles reside in the region between them and the gulf. Except for the occasional flight of an eagle or a bittern, startled by the strange invaders of their privacy, or for a view of the fishes in the shallow waters, gliding swiftly from your boat as it goes near to them, your eye would not rest on living thing, abiding in this wilderness of "grass waters," shrubbery, and flowers. Reflections upon the past history of the region around you, unbidden, force themselves upon the visiter to the interior of the glades. On these islands, in ages that have long since passed away, the haughty and ferocious Carib cacique dwelt. He and his people were driven from, their homes by more powerful people, who were, in turn, expelled by stronger foes. Here the daring and reckless Buccaneer, of later times, came, after his cruise for plunder, to revel in safety upon his unhallowed spoils. Once in this secluded spot the Catholic missionary pursued the heavenly vocation of teaching the benighted pagan the truths of the gospel; and here he sealed his devotion to his God by yielding up his life to the vengeance of the infidel savage. Part of these glades are now in the allotted district of the wily and intrepid Arpiarka, the chief of those of his tribe that fought so fiercely and so obstinately in resisting the enforcement of the policy of the federal government of removing them west; and who finally succeeded in constraining the United States to abandon that policy, and allow them to remain still longer on the hunting grounds, and near the graves of their fathers. The recollection, also, that the sacred name of "*Laguna del Espiritu Santo*" was given to this region by the Spanish discoverers, is not without influence upon the visiter. The effect of such visit to the PAHAYOKEE, upon a person of romantic imagination, and who indulges his fancies on such subjects, it may be presumed, would be somewhat poetic. But if the visiter is a man of practical, *utilitarian* turn of thought, the first and the abiding impression is the *utter worthlessness* to civilized man, in its present condition, for any useful or practical object, *of the entire region!* A solitary inducement cannot now be offered to a decent white man to settle in the interior of the everglades! Some of the *islands* may be fertile, but their inaccessibility, except by small boats, and the entire isolation from society their residents would have to encounter, would deter most men (who did not desire to avoid their fellows, either from misanthropy, or fear of justice for crimes committed) from making the glades their homestead.

Of the practicability of abstracting five feet or more in depth of the waters from the basin of the everglades, and from the Atseena-hoofa and Halpatiokee swamps, near the glades, by the means suggested, I have given my opinion, and the data on which it is founded. When the waters are thus abstracted, the deposite

beneath them in the basin, generally from two to three feet in depth, and sometimes more, before the rock is found, will be left exposed, and become dry. Whether it is of such character that, without any admixture of loam or other soil, it can be relied upon for the cultivation of anything, can only be determined by actual experiment. This deposit is exceedingly light, and, when dry and broken to pieces, becomes an impalpable powder. If it should be found to be a good compost, its speedy exhaustion, and its liability, when dry and exposed to the surface, to be removed by the winds, are obstacles to its extensive successful use, in the cultivation of sugar, rice, tobacco, cotton or corn, that should be anticipated. But even then, that the basin may be advantageously appropriated to the rearing of tropical fruit trees and plants, by excavations, if necessary, in the rock of its bottom, and filling them with the deposit and soil in their vicinity, I have little doubt; and that large tracts of fertile and valuable lands, adapted to the cultivation of *any* of the products named, can be reclaimed in the Atseenafoofa and Halpatickee swamps, by the undertaking suggested, if properly carried out, I do not question. I do not hesitate, also, to state my conviction that the increased value of the lands, thus reclaimed, would equal the cost of such undertaking. Besides, by decreasing the waters of Lake Ochechobee five or six feet, hundreds of thousands of acres of the best bottom lands, on the shores of the river Kissimee, and other rivers tributary to that lake, (those on the Kissimee extending the distance of one hundred miles up that river,) would be also reclaimed, and a large quantity northeastwardly of that lake, may likewise be drained by proper canals, as suggested, connecting the lake with the ocean, and lateral drains running into the prairies there situated.

The undertaking should, however, be commenced, conducted and completed on a somewhat different system than has been sometimes adopted by the federal government in reference to public works. Little expense need be incurred for theoretic plans, and what are generally styled scientific *prospectæ*; or in the employment of officers for such purpose, and for incidental charges, consequent on such systems. Like the construction of the levee on the Mississippi, it is an undertaking that cannot be advantageously effected by a small laboring force working at intervals. The main parts should all be done together. A numerous force should be employed, and combined operations at the different points be commenced and progress with equal rapidity. Those engaged in the work, if practicable, should be made interested in its proper execution; the most eligible means of effecting which result would be interesting them, upon liberal conditions, with the ownership of part of the lands sought to be reclaimed.

The completion of the work should be followed up by the immediate disposition of all the lands reclaimed. *Firstly*, to effect their speedy settlement; and, *secondly*, that the settlers might take the necessary steps to render their lands cultivatable, and to secure them from future inundation, by those improvements, of a *local* character, which will be found indispensable, in addition to the

general work, and which, in many instances, must be by the *united* labors of adjacent proprietors. These local improvements, requiring combination on the part of contiguous owners, should occasion the settlements to be, as far as practicable, of bodies or associations acting together; as was the policy pursued by the Spanish and French settlers, in early times, in Louisiana*. In the numerous *meadow* corporations in the middle and eastern States, can be seen examples of the benefits of such associations. I conceive it is not irrelevant for me to observe here that it may be doubted whether all this could be as well done by the federal government, and its engineer officers, as by the State of Florida, if the region proposed to be reclaimed was transferred to that State. The State government could, in such case, employ practical, energetic and economical superintendents, upon more advantageous terms than the United States; and who would have the stimulant of more direct responsibility to effect the speedy execution of the work; or it might find it beneficial to make arrangements for the work being done by associations of individuals, to receive their remuneration from the lands; provided proper precaution is taken to prevent speculators and jobbers acquiring possession of them; an effectual prevention of which would be the stipulation for their actual settlement and cultivation, if they should prove to be susceptible of cultivation, as one of the *tenures* by which they should be held.

The Ever Glades are entirely below the region of frost, and the meteorological and barometrical statistics of different times within the last eighty years, furnished by several different writers, prove that the climate is as favorable to the cultivation of tropical fruits as that of any country between the 28th and 24th parallels of either north or south latitude. De Brahm, in his MS. work, before noticed, has compendious tables which he calls "*Ephemerides*," containing useful information of this character, in relation to different points of the peninsula of Florida. Doctor Perrine has furnished similar tables, and he states that most of the productions, natural to the tropical latitudes, can be *best* cultivated on the borders of the temperate latitudes, nearest the equator; and experience verifies his statement. It is known that in China many productions, originally from between the tropics, have become acclimated, and are reared successfully as high as the 40° of latitude.

It has been suggested that extensive water power may be put into beneficial use, on the proposed canals, which would cause the timber in the adjacent country to become valuable, as it could be sawed for exportation; and the feasibility of the proposed canals being employed as passage ways for coasting vessels of light draft, and steamboats from the Gulf to the Atlantic, has also been intimated; but my investigations did not comprise those subjects. By accurate scientific surveys at different points can the correctness of these suggestions only be ascertained. The main and essential

* See note (b.)

fact of the level of the waters of the interior being several feet above those of the gulf, straits, and ocean, being so clearly manifest, such surveys are not necessary for the commencement of the work, except to ascertain the best localities with reference to all the advantages and disadvantages of the different points.

It has been objected that the draining of the Ever Glades may occasion the whole country to become unhealthy. Probably, for one or two seasons, such in some degree may be the case, but that it would not be permanent, experience as to similar works in the south fully proves. Lands and swamps in southern latitudes, insalubrious before being so improved, have by such work been rendered healthy. The coasts of South Florida are represented by writers respecting them, and by residents, to be as healthy as any other countries of the same latitudes; and I cannot perceive that any peculiar local cause exists to make the draining of the Ever Glades different in its consequences from the other similar works referred to.

I must not omit advertising to one source of profitable employment of labor and capital on the islands, keys, and coasts of South Florida. *It is the making of salt by solar evaporation.* Enough can be made there to supply the United States, and an overplus for exportation; thereby dispensing with the large quantity imported from Liverpool, the British islands, and elsewhere. There is already an association in operation at Key West, and the experiment has been tested. But it requires large means to commence such an undertaking on a proper scale. If the keys are settled, doubtless it would soon be put into operation by enterprising capitalists, and the most advantageous consequences result from it.

A description of the peculiarities of each part of the Ever Glades, visited by me; the depth of water at different points; the depth of the deposite at various places in the basin, and some notice of the most striking geological, botanical and other characteristics of this region, is given more in detail in the extracts from Lieutenant Martin's report, and notes and memoranda from my journal, added thereto, and all appended to this paper. From the facts there stated, and the data afforded, the scientific geologist, botanist, horticulturist, and agriculturist can, perhaps, decide as well in regard to the different kinds of products this region is susceptible of being made to yield, as from any *opinions* I might give, or arguments that I could offer to support their correctness. I presume no one will doubt that all of the products of the Bahamas can be raised in Florida, below latitude 28°, without difficulty. There have been, however, submitted to Congress, documents furnishing more direct and specific information, as to what can probably be reared in this region; and there are published works, containing valuable data of the same character, some of which I refer to in the subjoined note.*

Doctor Henry Perrine, who collected and compiled most of the

*See note (c.)

valuable information on this subject, contained in the Congressional documents referred to, some the result of his own practical experience, while United States consul at Campeachy, in Yucatan, and, subsequently, while residing in south Florida, was a gentleman of worth, intelligence, and scientific attainments. He applied to Congress for, and, after some years, there was granted to him, in 1838, a township of land in south Florida, for the cultivation of tropical products, which he had already commenced, before the breaking out of the seminoles war in December, 1835. It is not doubted that, but for that war and his death, in 1840, the scheme would have proved successful to the full extent of his anticipations. The location, in sections, of the township of land is now being made on the southern part of the peninsula, under the act of Congress, passed February 18, 1841, renewing the grant to his widow and heirs; but whether purchasers, who will become permanent settlers and cultivators, can be obtained, at this time, unless measures are adopted by the government to effect the early settlement of the country contiguous to it, and for the security of *all* against the Indians, and to afford them some intercourse, by mails, with the other parts of the Union, is, in my judgment, quite problematical.

If the hopes indulged of the favorable success of draining the Ever Glades should be but *partially* realized; if the interior of the glades, from the causes I have intimated, or others, should be proved, by the test of experiment, not to be adapted to the cultivation of sugar, cotton, rice, and tobacco, corn, Sisal hemp, and the other most important products, specified in the documents and publications referred to; and the extensive region in the basin now *subaqueous* is, in consequence, as I have little doubt it can be, appropriated, profitably, to the growing of tropical trees and plants bearing fruits, as I have suggested, the result will still be highly beneficial to the Union, and, in my judgment, will fully compensate for the expenses incurred. If the large quantities of lemons, limes, oranges, bananas, plantains, figs, olives, pine apples, cocoanuts, and other tropical fruits, enumerated in the publications cited, now imported, at high prices, from the West Indies and elsewhere, could be supplied, or only *in part* supplied, from this region, it would be of no trifling advantage to the whole country. Such fruits could be shipped to any part of the United States in less time, in better preservation, and, of course, at much less loss, and cheaper than from any part of the world, and without the payment of any export or import duties. This region, it should not be forgotten, is the *only* section of the Union the climate of which is congenial to such productions in such degree that any expectation may be entertained of rearing them for shipment, and the only region that can be looked to as capable of rendering us, to any extent whatever, independent of other countries with respect to those productions. But if it should be ascertained that the more important staples of sugar, &c., before specified, can *also* be advantageously cultivated in south Florida, after this undertaking is finished, *then*, that the results must be of inestimable value to the

whole confederacy, will be so clearly manifest, as to render comment wholly superfluous.

Eminent statesmen and philosophers have, in estimating the services of individuals to their country, and to their fellow men, advanced the opinion, that he who causes two sheaves of wheat to grow where one only grew before, better deserves the thanks of his race, than the author, the legislator, or the victorious general. The degree of merit awarded by them to the particular act first specified may be extravagant; but no one of sound moral judgment will, it is presumed, deny, that the increase of the agricultural resources, and the promotion of the agricultural interests of a people already politically free, is the very highest service that can be rendered them, and most conducive to the preservation of their independence, prosperity, and happiness. The citizen, whether in executive or legislative station, or without either, who succeeds in making fit for cultivation, even if but partially, a region equal in extent to either of the three smallest States of this confederacy, *now* as useless as the deserts of Africa, will earn a rich meed of praise from the people of Florida, and of the Union. The Ever Glades are now suitable only for the haunt of noxious vermin, or the resort of pestilent reptiles. The statesman whose exertions shall cause the millions of acres they contain, now worse than worthless, to teem with the products of agricultural industry; to be changed into a garden in which can be reared many and various exotics, introduced for the first time for cultivation into the United States, whether necessities of life, or conveniences, or luxuries merely; that man who thus adds to the resources and wealth and independence of his country, who contributes by such means to the comfort of his fellow men, will merit a high place in public favor, not only with his own generation, but with posterity. He will have created a State! I feel that to be connected with the inception of a measure which, if carried out properly, will probably produce such results; to be identified, even in a secondary position, with the commencement of an undertaking that must be so eminently beneficial to my country, is a privilege of no mean consideration.

The failure of many visionary projects and wild schemes, put forward by deluded theorists, or contrived by idle speculators and jobbers, in every part of the United States, to cheat the credulous, has excited distrust of every undertaking, of a character at all similar to that proposed with reference to the improvement of South Florida. The federal government is the proprietor of the entire country proposed to be immediately benefitted by such improvement. Excepting the lands comprised in three or four small Spanish grants that have been confirmed as valid, and the township conditionally granted to Doctor Perrine, and renewed to his widow and heirs, which contain 23,003 acres, and excepting also some four or five hundred acres now owned by purchasers at public sale or private sale by the United States, on the eastern coast, and some few thousand acres possessed by occupants under the pre-emption laws, or those under the acts for the armed occupation of the peninsula, the United States yet own all the lands south of the

upper end of Lake Okechobee. Of course I exclude the "Alagon" claim as invalid. The Ever Glades are not surveyed, and will not probably ever be surveyed for sale by the United States.* Such survey, if practicable, would be useless before the proposed improvement is effected. The work proposed should be undertaken and completed only by the proprietors of the lands to be benefitted. Unless the United States undertake it, every liberal principle of policy, every dictate that should influence a great and enlightened government, demands that it should at once place this district, now worthless to the human race, in the hands of those who will undertake and accomplish such improvement. A huckstering, or a "dog in the manger" policy, with respect to these lands and swamps, would, it is submitted, be unbecoming the American people.

It is not pretended that it is an easy undertaking to complete the proposed improvement, and effect the settlement and cultivation of these lands, even if the work should be commenced under favorable auspices. It is a work of time to do all this.

Vast expense, great labor and trouble, and no little hazard, will attend it, and when the improvement suggested is finished, the settlers will, of necessity, have to expose themselves to all the deprivations and hardships incident to a new country. Without industry, perseverance, prudence, self-denial, and economy, it should not be expected, and it would be cause of regret if it could be expected, that the emigrant thither, could without such qualities better his condition more readily than elsewhere. *With* these qualities, if the work suggested is completed, and if the result is as favorable as some anticipate, a population of perhaps two hundred and fifty thousand souls can ultimately live in the reclaimed region, subsist themselves as comfortably as in any country on the face of the earth, and add much to the domestic trade of the Union.

It is proper also that I should advert in this report to a subject intimately connected with the favorable success of the primary undertaking of draining the Ever Glades, and rendering them capable of being cultivated profitably. It is the adoption of necessary measures by the federal government for the procurement of exotic plants and seeds, roots, &c., and such productions as can be reared there, for the use of the settlers. Whilst the manufacturing, the commercial, the navigating, the mechanical, and, in fine, every other interest in society, has been encouraged and fostered by measures adopted with a view of affording them direct aid and protection, is it not astonishing that the agricultural interest of this country has been so entirely neglected! Excepting the limited assistance given by the Patent Office in the procurement and distribution of seeds, scarcely any attention has been bestowed upon this subject by statesmen of later years. Resolutions of the Florida legislature, calling the attention of Congress to it, though laid before Congress, have not received favorable consideration. The worthy example of Mr. Jefferson and others of our

* See Colonel Butler's (surveyor general) letter in the appendix.

former illustrious public men, who manifested a deep interest in this subject, seems to be almost forgotten, and resolutions and acts passed years since, for the purpose of affording aid to the agriculture and horticulture of the country, have passed into disuse, or are executed in such manner as to render them of little value. The federal government, by means of the navy, continually visiting foreign countries, and through our ministers and consuls abroad, could obtain and distribute properly many trees, plants, and other productions of the forest, field, and garden, and introduce them for cultivation in those parts of the United States best adapted to them, and thereby effect incalculable good. The States, or associations of individuals, have not the facilities possessed by the federal government to do this. It is not doubted by me, that ten thousand dollars per annum, appropriated to such object, and properly expended, and the plants, seeds, roots, &c., distributed amongst agriculturists and horticulturists, rather than theorists and mere book farmers, and instead of placing them in show gardens and conservatories in cities, have them sent into the appropriate sections of the country, would be a judicious measure. Hundreds of valuable productions from Cuba, the West Indies, Mexico, Yucatan, Gautemala, South America, Spain, Portugal, Italy, Sicily, and even from China, the East Indies, and from Africa, now unknown to us, could be obtained and distributed by the means suggested; and they could be cultivated in South Florida, affording new varieties of articles for human subsistence, and opening new fields for labor and enterprise.

To some, the suggestions I have made may, perhaps, appear of less moment than they seem to me; others may regard them as trivial, and I shall be fortunate if there are not those who (uniting to paucity of intelligence and intellect a want of taste and decorum) would subject them to the false test of ridicule. I am satisfied, however, that enlightened and liberal men, who will reflect upon the facts adduced, and the *possibility*, if they cannot concede the *probability*, of the results being as favorable as has been predicted, will yet admit the undertaking proposed is deserving favorable consideration, and at an early period. If it should be successful, who will venture to foretell the ultimate favorable effects and consequences that may flow from it. Events deemed trivial have oftentimes had a potent influence in the progress of a nation to prosperity and honor, or to ruin and disgrace. No one can see what, under God's Providence, is to be the destiny of this mighty confederacy. Incidents that have occurred in our career, deemed at the time of less importance than the measure proposed, have in no small degree influenced our progress in all that gives strength, glory, and prosperity to a people, to a point far beyond the anticipations of our wisest and most farseeing sages of the last century. Seventy years ago, the right of navigating the Mississippi to the gulf, was regarded as of little worth. It was proposed, in 1778, to relinquish it to Spain for £300,000. It was then supposed it was of little value, because, if ships could go down, they could never get up that river! Those esteemed as

among the wisest statesmen of that day, laughed at estimates made by some of their contemporaries of its value, as being absurdly extravagant, which estimates all now know appear ridiculous for their moderation.

At the close of the revolutionary war, it was said by many that the whole country west of the Mississippi was a sterile, irreclaimable, howling wilderness, fit only for the range of the buffalo, or for hunting grounds for the savages; and that the white man would never settle in and inhabit that region. Millions of American freemen now till these lands; the buffalo and the savage have receded before them to the vast territories still farther to the northwest, and extending to the Rocky mountains. Nine independent States have been founded and organized west of the Ohio and Mississippi. Other new States are rapidly growing up, on the extreme western borders of those already formed. Cities and villages adorn the banks of those noble rivers and their tributaries, and embellish the interior of the country. The march of civilization has extended several thousand miles beyond what was, half a century since, deemed its bounds on this continent; the Rocky mountains have been crossed, and the shores of the Pacific are rapidly being peopled by American citizens. The rivers that, within the memory of many still living, were not regarded as of such momentous value, are now navigated by numerous steamboats, freighted with portions of the rich agricultural products of the fertile valleys through which they run, to the great and growing "Crescent city," from which they are sent to other parts of the Union, or to foreign countries. Railroads or canals running through the interior, to the Atlantic seaboard, convey other portions of these products to market. Both means of transit are likewise employed in carrying back to the great West the many millions of dollars in value, of the merchandise of every country on earth, received in exchange for that produce.

The history of the introduction into this country of cotton and rice, and of their increased production till they have become the great staples of the south, is also a striking illustration of the wisdom of those statesmen who do not discourage or discard measures which, some suppose, may be beneficial to the country, because they are not able to calculate, with arithmetical certainty, that the results will be profitable to a precise amount in dollars and cents; or because they cannot, at once, see that the consequences will be as promised.

Though it is not anticipated that the draining of the Ever Glades, and the settlement of south Florida, and the cultivation of exotics of the kinds mentioned on the many thousand of square miles of land in that region, will change the destiny of the confederacy, or either cause or prevent any great revolution on this continent, yet, looking at the past incidents I have alluded to, it may, without extravagance, I think, be foretold that if anything approximating to the sanguine expectations of many intelligent officers and citizens are realized, in less than ten years a new independent State may be added to the Union, formed out of east and south

Florida; dissevering the unnatural connexion now existing between them and middle and west Florida; sections totally dissimilar in pursuits, interests, and habits from the former; and the enterprise, industry, and progressive spirit of our citizens of other portions of the Union, now led elsewhere, may be directed into channels equally profitable, and more conducive to the peace, prosperity, and permanent happiness of the Union, and the perpetuity of our republican institutions.

I have thus given to you all the information upon the subject, submitted to my examination, that I can furnish. Whether the undertaking, which, if it succeeds as hoped, promises to be so eminently beneficial to the country, should not be commenced forthwith, I submit to your patriotic and enlightened consideration. In my judgment, the experiment is worth a trial.

I have the honor to subscribe myself, with high respect, your obedient servant,

BUCKINGHAM SMITH.

NOTES.

(a) Professor Nicolet, in his sketch of the history of St. Louis, Missouri, in page 92 Senate document No. 237, printed February 10, 1841, 2d session 26th Congress, says:

"Is it not surprising, that, during the thirty-two years that Spain had possession of Upper Louisiana, the province was never settled by native Spaniards, excepting the officers who ruled over it and a few fur traders? The inhabitants were French, or the descendants of French, from Canada or Lower Louisiana; and the Spaniards have left no remembrances of themselves, saving their land register—no institutions, no works, not a single monument of public utility. *Doubtless the golden treasures buried in the mountains of Mexico and of South America were too alluring to allow emigrants to be tempted from them and engage themselves in the labors of agriculture in the rich valley of the Mississippi.* But, taking a retrospect when Spain was the greatest of maritime powers; when, during the reign of Ferdinand and Isabella, her navigators discovered new worlds, giving her an empire on which the sun never set; when the great armada struck terror in the bosom of the haughty Elizabeth, it becomes painful to think how ephemeral is the ascendancy even of the bravest and most prosperous nations; how truly rapid their decline and fall!"

(b) Page 85, same work, alluding to the attack of the Indians on St. Louis, in 1780, and its defence, he says:

"It may be well to remark, in this place, that this event proves the policy that has prevailed in Canada and Louisiana, in granting lands to the colonists, whereby they were commanded not to scatter themselves, but to concentrate into villages under the protection of the forts; thus combining for mutual labor as well as mutual defence. Hence, the government ceded tracts of land for a whole community, on condition that they should be worked in a body. There was first a field assigned, the extent of which was proportioned to the number of families in the village. To each family was allotted a certain portion for cultivation, and all contributed to its general enclosure. Another tract was laid out for the pasturage of the stock, and a third in wood land. These concessions were called *common lands*, or simply *commons*. There were yet, a few years ago, such commons in the neighborhood of St. Louis, Carondelet, St. Genevieve, Kaskaskia, and near almost all the French villages in Missouri and Illinois."

(c) Reports of Committee on Agriculture, House of Representatives U. S., 1st session 22d Congress, No. 454, by Mr. Root, April 26, 1832; of same committee, 2d session 25th Congress, No. 564, by Mr. Deberry, February 17, 1838; of Committee on Agriculture of Senate U. S., 2d session 25th Congress, No. 300, by Mr. Linn, March 12, 1838—the last containing some valuable plates. All these reports are respecting Dr. Perrine's undertaking to rear tropical plants, &c., in South Florida. See also Roman's, John Bartram's William Bartram's, Roberts's, and J. Lee Williams's works on Florida, and De Brame's MSS.

APPENDIX.

1. Extract from report of Colonel R. Butler, surveyor general of Florida, to Commissioner of the General Land Office, in 1847.
2. Letter from General James Gadsden, of South Carolina, to Hon. R. J. Walker, Secretary of the Treasury, dated May 7, 1847.
3. " from Major General T. S. Jesup to Hon. J. D. Westcott, jr., dated February 12, 1848.
4. " from General Wm. S. Harney to Buckingham Smith, esq., dated January 23, 1848.
5. " from Colonel S. H. Long, topographical engineers, to Hon. J. D. Westcott, jr., dated February 7, 1848.
6. " from Major J. D. Graham, topographical engineers, to Hon. J. D. Westcott, jr., dated March 1, 1848.
7. " from Captain J. McClelland, topographical engineers, to Hon. J. D. Westcott, jr., dated February 25, 1848.
8. " from Com. L. M. Powell, United States navy, to Hon. J. D. Westcott, jr., dated March 1, 1848.
9. " from Lieutenant C. R. P. Rogers, United States navy, to Hon. J. D. Westcott, jr., dated February 10, 1848.
10. " from A. H. Jones, esq., United States surveyor, to Buckingham Smith, dated November 12, 1848.
11. Memoranda as to *Ever Glades*, by S. R. Mallory, esq., collector of the customs at Key West.
12. Extracts from MS. of John Lee Williams, esq., as to *Ever Glades*.
13. Extracts from MS. of John Lee Williams, esq., as to Big Cypress swamp.
14. Letter of J. T. Sprague, captain United States army and Indian agent in Florida, to Buckingham Smith, esq., dated Fort Brooke, December 4, 1847.
15. Extract from a letter from R. R. Sewall, esq., to B. Smith, esq., dated March, 1848.
16. Letter from George McKay, esq., United States surveyor, to B. Smith, esq., December, 1847.
17. Letter from Major Wm. H. Chase, United States engineers, to Hon. J. D. Westcott, jr., August, 1847.
18. Letter from Hon. J. D. Westcott to the Secretary of the Treasury, dated May 11, 1847.
19. Instructions to B. Smith, esq.
20. Instructions to Lieutenant Martin.
21. Resolutions of the House of Representatives of the State of Florida, 1845.
22. Resolution of the Legislature of the State of Florida, 1848.

23. Report of committee of House of Representatives of Florida, in 1845, respecting cultivation of tropical fruits, &c., and resolution and extract from acting governor's message on same subject.
24. Report of the judiciary committee of the House of Representatives of Florida, March 4, 1845, respecting *fisheries* of Florida, and resolutions adopted same day by House of Representatives, and documents annexed to said report, viz: Extract of message from acting governor Westcott, and report of committee of legislative council thereon, and letter of Governor Duval to Secretary of State of the United States.
25. Lists of wrecks on Florida reef, and of vessels that put into Key West in distress in the years 1845, 1846, and 1847. The list for 1847, copied from Senate document, 2d session 29th Congress, No. 110, volume 3.
26. Extracts from the reports to the Navy Department by the officers of the navy on the Florida expedition, in 1841 and 1842, under command of Lieutenant McLaughlin, taken from the files of said department.
27. Extracts from the journal of Lieutenant Francis Martin, commanding the revenue cutter Wolcott, in 1847; and *notes* from memoranda of Buckingham Smith, esq.

No. 1.

Extract from the report of Colonel R. Butler, surveyor general of Florida, in 1847, to the Commissioner of General Land Office. See Ex. Doc. No. 2, 1st session 30th Congress, page 155.

"I now ask your attention to the *Ever Glades*, which cannot be surveyed without first being drained. You will observe, from the diagram map accompanied, that the surveys have been extended round a large portion of them, and I am led to believe that, if drained, a region of valuable land would be reclaimed and rendered very productive; but, being interior and without any navigable stream flowing from them, a question arises whether the draining of them by the United States would not conflict with State sovereignty; and if Congress should so determine, might not a grant, for specific purposes, (making roads and building bridges to facilitate intercourse,) be made to the State of Florida of one moiety, in a definite form, conditioned that the State authorities cause them to be drained at the State's proper cost and within a given period, of which I believe them susceptible. The United States would thus realize, for survey and sale, the other moiety, and the State acquire a valuable fund for the purposes above stated, after meeting the expenses of draining; and thus would be opened a large fertile surface for the habitation of man, cultivating sugar and tropical fruits extensively thereon."

No. 2.

Letter of General James Gadsden, of South Carolina, to Hon. R. J. Walker, Secretary of the Treasury.

WASHINGTON, D. C., May 4, 1847.

DEAR SIR: At the request of Hon. Mr. Westcott of Florida, stating at the same time that it would be acceptable to you, I take the occasion of expressing an opinion favorable to the practicability of draining the *Ever Glades*, and with them, by same process, most of the low lands and prairies forming the basin of the upper St. John's river.

In the years 1823 and '24 I was engaged in defining the Indian boundaries, under the treaty of Fort Moultrie, and, at the same time, in examining into the practicability of a road from St. Augustine to Cape Florida.

In the surveys, and examinations connected with the performance of these operations, I was forcibly struck with the fact of the elevation of these regions above the level of the sea, and which had

been supposed to be submerged, forming lakes, impenetrable swamps and lagoons.

The elevation of the Ever Glades and prairies of the St. John's above tide water, proved the capability of their being drained, while the inlets along the coast, and the number of small rivers and creeks, which at seasons relieved the overflowings of the interior basin of Florida, showed that by deepening these natural outlets at their heads, and multiplying the number of parallel and artificial cuts at favorable points, the whole country, at times submerged, might be reclaimed and brought into profitable cultivation. If I did not advert to these views in a report made at that early period to the Department of War, I have subsequently mentioned them in conversation, and, I think, at one time gave publicity to them, with some details, through the columns of a newspaper.

The subject is one of great public interest, in my estimation, and merits investigation; for, should the basin of the interior of Southern Florida be susceptible of reclamation, it will open to the United States the only portion of her territory capable of competing with tropical latitudes in all those productions which enrich them. I write in great haste, and would, if desirable, when more at leisure, enlarge on the views herein so briefly conveyed.

Respectfully,

Your obedient servant,

JAMES GADSDEN.

Hon. R. J. WALKER,

Secretary of the Treasury.

No. 3.

*Letter from General Thomas S. Jesup, Quartermaster General, to
Hon. J. D. Westcott, U. S. Senator.*

WASHINGTON, February 12, 1848.

MY DEAR SIR: In reply to your inquiry whether it would be practicable to drain the *Ever Glades* in South Florida, and what would be the advantages, political and military, of that measure, I have to remark, that I entertain no doubt of the practicability of the measure.

From my own observation when commanding the army operating in that country ten years ago, as well as from reports made by, and information derived from, intelligent officers, who operated near and who explored the everglades, and the large lake (Okechobee) north of them, I have no doubt both the glades and the lake are from thirty to fifty feet above the level of the sea in the most violent storms. The practicability of draining both I take for granted. As to the expense, that can be determined only by accurate surveys. The effect of the measure would be to reclaim many hundred thousand acres of valuable land, without including the bed of the Ever Glades, now subject to inundation for several months in every year.

The Kissime river is the outlet of Lake Tohopekaliga, and connects that lake with the great lake Okechobee. It is a sluggish stream, bordered by a large body of as rich lands as any in the south, which it inundates to a vast extent during the rainy season. Were the surface of the lake and the Ever Glades lowered, those fine lands would be reclaimed, and would soon be converted into as valuable sugar plantations as any in the world. The hammocks in this part of the country are all extremely rich, and would all soon be converted into sugar plantations. The swamps are generally peat swamps, which, if drained, would soon be converted into olive, lime and orange plantations, and would be cultivated by a numerous white population, which would be interposed between the sugar plantations, cultivated by slaves and the free blacks of the West Indies. This, in a military point of view, would be highly important, and add greatly to the strength and security of the south.

To protect our valuable and growing western and southwestern commerce, we must command the communication between the Atlantic and the Gulf of Mexico. This can be done only by fortifications on the Florida keys, combined with war steamers: to support those fortifications we require a numerous population in their rear.

One of the effects of reclaiming the inundated lands of South Florida will be to give us this population, whose labors will render us as independent of the West Indies, as regards most of the tropical products, as their presence will protect us from the influence of the policy adopted in the British islands.

You must take these crude and hasty remarks for what they are worth; for pressed as I am by official engagements, I can do justice neither to the subject nor to myself—I have not time, even, to read what I have written.

I am, most respectfully,

Your obedient servant,

TH. S. JESUP.

The Hon. J. D. WESTCOTT,

Senate U. States, Washington.

No. 4.

Letter from General William S. Harney, U. S. Army, to Buckingham Smith, Esq.

WASHINGTON, January 23, 1848.

DEAR SIR: I cheerfully comply with your request to state to you, in this form, my knowledge of that region of your State called the "EVER GLADES," and my judgment as to the feasibility of draining them, and as to the mode of draining them, and the benefits that would ensue therefrom.

During the late Seminole war I was repeatedly in the Ever Glades, and on the rim or margin at different points, and crossed it from Miami to Shark river. It is a vast, fresh water lake, of shallow

depth, from sixty to ninety miles in length, and from twenty-five to fifty miles in width. Its general depth is from two and a half to six feet of water, over (say from two to six feet of) soft mud, or vegetable deposit. It is interspersed with thousands of islands, from a quarter of an acre to several acres in area, and generally having a few trees on them. Water grasses, of several feet in height above the water, cover its entire surface, except in a few channels, or where there are small ponds of water with sand bottom, from three to five feet deep. There are no trees in the waters of the interior of the Ever Glades, but the margin of the "Glades," running out about on an average one mile, is full of fine cypress trees. The Ever Glades are supplied with water, in my opinion, from two sources: 1st. The rains that fall in it; 2d. From the Lake Okechobee, lying on its northern extremity, and separated from it by a very narrow strip of grass swamp. This is proved by the fact of which I have been informed, and of the truth of which I am satisfied, that in seasons of drought the water in the Ever Glades is very much diminished, and its fall in such seasons corresponds to the fall in the adjacent lake. The lake is a deep reservoir for the rains that fall on the eastern, northern, and western sides of it, for many miles, (the country, for some distance, depressing as its shores are approached.) On its northern side it receives all the waters of the Kissimee river and its tributaries, rising over a hundred miles further up the peninsula, and being the natural drains for that distance for the whole region, except that contiguous to the sea and gulf coast, or the river St. John's, and the lakes at its source.

The bottom of the Ever Glades, below the deposit I have mentioned, is of lime-rock, common in that region, and its general level, I am fully satisfied, is several feet above the level of high water in the gulf of Mexico on the west, or the straits of Florida on the east and south—a few miles only distant from the rim or margin, for fifty or sixty miles from its southern extremity. Of the practicability of draining them, I have no question. That such work would reclaim millions of acres of highly valuable lands, now utterly valueless, because incapable of use, I have no doubt. My plan for doing the work would be to dig a large and deep canal, from Lake Okechobee into the Caloosahatchee river, on the west side, and a like canal from the lake to the head of the Lochahatchee river, on its east side, and smaller canals from the Glades through the river into the head of the Ratones, Little river, Arch creek, Miami, Shark river, and other outlets on both sides of the peninsula. I am satisfied these canals and drains once opened, the Glades will become dry; and I am also convinced these canals could be easily kept open by the water running through them. Of the cheapest mode, and of the cost of such undertaking, I cannot pretend to make an accurate estimate. The two chief canals would not, probably, be more than ten, or, at the outside, fifteen miles in length, each; thirty feet wide, and from five to fifteen feet deep; and the others need be but small drains or ditches, of from three to five miles in length. No person can say with positive certainty what the soil of the Ever Glades, when drained, would or would not pro-

It is a vast, fresh water lake, of shallow

duce; but it is my opinion it would be the best sugar land in the south, and also excellent for rice and corn. But if not, it could, at any rate, in that latitude, be made valuable for the raising of tropical fruits, and it is the only region of the present United States in which they can be raised. Its being made susceptible of cultivation, (and, instead of being, as now, a waste of waters, fit only for the resort of reptiles,) would be a happy epoch for Florida. I do not know of a project that I regard as more calculated to benefit the country than this, if successful. If it does succeed, it affords the Union just the kind of cultivatable land that is wanted to render us, to a great extent, independent of the West Indies. If it does succeed, in less than five years that region will, I have no doubt, have a population of a hundred thousand souls, and more. Our coast in south Florida is now extremely exposed in time of war. This population would protect it, and afford security to the whole commerce of the western country passing along its shores. It would also tend to the security of the entire southern portion of the Union in an eminent degree. But it is not necessary for me to advert to these considerations. This letter is already tedious, and I close it with the assurance that

I am, respectfully, your obedient servant,

WM. S. HARNEY,

Colonel United States Army.

To BUCKINGHAM SMITH, Esq.

No. 5.

Letter from Lieutenant Colonel S. H. Long, topographical engineers, to Hon. J. D. Westcott, U. S. Senator.

PITTSBURG, February 7, 1848.

SIR: I have perused with interest and satisfaction, the several papers you did me the honor to exhibit for my inspection, in relation to the Ever Glades of your State.

Although I have never had an opportunity of visiting that part of the country, yet from the documents above mentioned, and from conversations with several intelligent gentlemen who have explored the Ever Glades, I have obtained much authentic and valuable information, in regard to the character and aspect of the district of country designated by that name.

The main body of this district appears to be situated between 25° 31' and 27° of north latitude, and between 80° 30' and 81° 15' of west longitude, from Greenwich. Its extent from north to south is about 100 miles, and its average width from east to west about 50 miles. It is bounded on the north by Lake Okechobee, which may be regarded as an extensive water-sheet covering a portion of the Ever Glades, and holding it in a state of constant submersion, and on the east, south, and west, by a sort of rim or margin, elevated a few feet above the common level of the included district and of the circumjacent country. A profusion of insular tracts of

greater or less extent, and of elevations about equal to that of the rim, or a few feet above the common level of the district, are scattered in every direction over the surface of the district.

With the exception of these insulated tracts and the rim with which it is bounded, the entire district is subject to periodical overflows of water, to the depth of two or four feet, during the rainy season, which usually prevails from August or September to February or March of every year. These overflows are supposed to have their principal origin in the country northward of Lake Okechobee, and to be brought down to the lake through the channel and valley of the Kissimee river.

The entire district embraces an area of about five thousand square miles, nearly one-half of which, agreeably to the best information I can obtain, is susceptible of drainage, and when thus reclaimed, would present fields of vast magnitude, adapted to the cultivation of sugar, rice, and numerous tropical products of great value. The method of drainage that has been proposed and recommended is as follows, viz:

1st. A spacious canal or drain leading from Lake Okechobee westward, through the valley or pass of Caloosahatchee river to the Gulf of Mexico;

2d. A similar canal leading from the same lake eastward, through the valley of Lochahatchee river to the Atlantic ocean; and

3d. Numerous drains of much smaller size leading across the rim, and communicating respectively with one or more of the numerous rivulets that rise in the vicinity of the rim, and empty into the gulf of Mexico and Atlantic, at various points along the coast of Florida.

It is believed by many that the two large canals first mentioned, will amply subserve the purposes of drainage; but, should they prove inadequate, that the desired end may be effectually attained by means of the smaller drains mentioned in the third proposition.

The practicability of draining the Ever Glades must, of course, depend on the elevation of Lake Okechobee and of the Ever Glades themselves, above the level of the high tides in the ocean. This elevation is supposed to be from twelve to twenty feet. The difference of the levels alluded to, so far as I can learn, has never been determined by instrumental surveys. Its accurate determination should unquestionably precede any attempts to accomplish the object in view.

By means of the two canals connecting Lake Okechobee with tide water, together with a lock in each (if found necessary) of suitable dimensions to admit small coasters and steamers, it is supposed that a line of continuous navigation may be opened entirely across the isthmus of Florida, from the Atlantic to the Gulf of Mexico. In case the locks should be found expedient and proper, they should be accompanied by spacious waste-weirs or sluices, and perhaps flood-gates, in order to afford a full and free discharge of water from the lake, &c.

The portion of the Ever Glades believed to be susceptible of drainage, in the manner herein contemplated, embraces an area of at least one million of acres, and the cost of drainage, surveys,

&c., included, it is also believed, will not exceed three hundred thousand dollars, or thirty cents per acre.

The benefits likely to result not only to the State of Florida, but to the United States generally, are incalculable. These advantages will manifest themselves not only in giving great value to lands now entirely waste and useless, but in adding an incalculable amount of the choicest and richest products to the means of subsistence and to the comforts of human life. An early appropriation to the amount above mentioned, viz: \$300,000, is deemed advisable, and is hereby most respectfully recommended.

I have the honor to be, sir, very respectfully, your obedient servant,

S. H. LONG,

Lientenant Colonel Topographical Engineers.

Hon. J. D. WESTCOTT,

United States Senate.

No. 6.

Letter from Major J. D. Graham, topographical engineers, to Hon. J. D. Westcott.

WASHINGTON, March 1, 1848.

SIR: Having considered the very interesting and important subject of draining the submerged district of country within the State of Florida, known by the popular name of "the Ever Glades," I cheerfully say that I fully concur in the views and opinions expressed in the letter of Lieutenant Colonel S. H. Long, of the corps of topographical engineers, addressed to you from Pittsburg, under date of the 7th of February ultimo.

I will only add, that in my opinion the drainage should be effected through the channels of rivers already communicating with the sea. This would be done by artificial canals made to draw the water from the "Ever Glades" into the head branches of these rivers.

I am, very respectfully, your obedient servant,

J. D. GRAHAM,

Major Topographical Engineers.

Hon. J. D. WESTCOTT,

United States Senate.

No. 7.

Letter from Captain J. McClelland, topographical engineers, United States army, to Hon. J. D. Westcott, United States Senator.

WASHINGTON CITY, February 25, 1848.

DEAR SIR: In reply to the inquiries made by you a few days since, in regard to the character of the Ever Glades of Florida, the nature of their soil and of that of the country in their vicinity, and of the possibility of draining them, I give you with pleasure the following information obtained by me in the course of an expedition to them, and the Big Cypress swamp, against the Seminole Indians in January, 1841.

After leaving the Caloosahatchee river, at a point about thirty miles above its mouth, we traversed a prairie in a southwesterly direction, and at the distance of twenty-five miles reached the north side of the Big Cypress swamp; our direction was then changed to the east, and, after marching a distance of thirty miles, we reached the west side of the Ever Glades. We observed that the prairie had been overflowed, and that the water had receded to the Ever Glades, showing a descent towards them. The soil of the prairie is a rich limestone, rocks of which were visible in many places; the surface of the ground was covered with a rich coat of grass, the best evidence of fertility, and the soil of the hammacks, with which the prairie is interspersed, cannot be exceeded for richness. It is to be presumed, that as the prairie, when overflowed, is part of the Ever Glades, that the character of their bottom corresponds with that of the prairie in composition and fertility.

The overflow of the country west of the Ever Glades is caused by the rush of water from Lake Okechobee, first to the Ever Glades, and the slowness of its escape to the Atlantic causes it to spread westward, so that by draining the Ever Glades, you would secure from inundation this rich prairie; and in all, there would be reclaimed in the Ever Glades a tract of the richest sugar and cotton land of 2,700, and in the prairie 8 or 900 square miles; and by the means used for effecting your purpose, a canal 12 miles in length, from the lake to the head of Caloosahatchee, and another, say from 10 to 18 miles long, from the lake to the head of the Lochahatchee, you would obtain a water communication (canal and river) between the Atlantic and gulf, and at a cost probably not more than three or four hundred thousand dollars, depending upon the dimensions adopted for the canals and other drains, but certainly inconsiderable, compared with the great benefit to be derived from the expenditure.

The Ever Glades were traversed in various directions during the campaigns against the Seminoles, and the description given of them by the officers engaged in the expedition, agree that "they are interspersed with islands in every direction, varying in size, but all having a rich soil and luxuriant growth upon them."

In the course of the year 1840 or 1841, I was informed by the late Captain J. R. Vinton, 3d artillery, that he had run a line of

levels from the Atlantic ocean to the Glades, and found their elevation above it from ten to fifteen feet. This was taken at Fort Dallas, at the mouth of Miami river, which empties into Biscayno bay. The height of Lake Okechobee must be considerably greater than this.

I am, very respectfully, your obedient servant,

J. McCLELLAND,

Captain Topographical Engineers.

Hon. J. D. WESTCOTT,

United States Senate.

No. 8.

Letter from Com. L. M. Powell, United States navy, to Hon. J. D. Westcott, United States Senate.

WASHINGTON, March 1, 1848.

MY DEAR SIR: I have read with great interest the papers submitted by several officers familiar with the topography of southern Florida, touching your proposed plan for the drainage of the great basin of the Ever Glades, and, without presuming to offer an opinion as to the expense of so great an undertaking, (great in its results, I mean,) I may be pardoned if I express my entire conviction of its practicability—an opinion formed in 1837, when I first viewed the Ever Glades, and not changed upon a subsequent partial exploration.

I have entered the Glades from several points on the eastern coast of Florida, and never failed to find a decided current between the tidal water level and that of the waters of the lake, the rivers, heading in the Glades, obstructed at or near the junction by rapids, or as at the Miami by a pretty fall of fifteen or twenty feet.

This surely indicates a level to the bottom of the basin of the Glades, when the known depth, a foot or two at most, is considered much above the level of tide water, which strips the question of thorough drainage of its most imposing difficulty.

Again, the margin of the Ever Glades, wherever I have viewed it closely—as, for example, where the waters of the lake break through it and form the sources of the eastern rivers—is composed of a ledge of limestone, which crops out and makes a ridge to this shallow but extensive basin. I have seen this formation at different points, and, from the uniformity of its geological features, do not doubt that it is characteristic of that portion of South Florida known as the Ever Glades—the Okechobee included, which is only the deepest and least obstructed part.

A knowledge of this fact indicates the remedy for the second difficulty to be encountered in the proposed work. If mere drainage of the waters be desired only, a bountiful Providence has already pointed out the way, and has partially accomplished it.

The surplus waters of the great lake have, at several points, and by the nearest route, worn down the narrow rocky girdle and opened a deep and ample channel beyond it to the sea. We have only to follow up the work, and break down the barrier to the proper level at these natural outlets, *to empty out the basin.*

Should the bottom of the Okechobee lake be found, on survey, to be below the necessary level for drainage merely, so much the better. A canal or cut, from the head of one of the rivers on the eastern side, would connect the lake with the Atlantic ocean, and, in conjunction with the taps made into the wall of the great basin further south, as at the Miama, Arch creek, Ratones, New river, &c., would open a navigation to the interior, and effect the desired drainage.

The results of such a work as this are beyond mere speculation. A vast extent of fertile lands which, if not within the tropics actually, have truly a tropical climate to mature the products of the soil, would be reclaimed to the use and enjoyment of man.

I am, dear sir, yours, faithfully,

L. M. POWELL,
Com. United States Navy.

Hon. J. D. WESTCOTT.

No. 9.

*Letter from Lieutenant C. R. P. Rodgers, United States navy, to
Hon. James D. Westcott, United States senator.*

WASHINGTON, February 14, 1848.

SIR: During my three years' service in Florida, I traversed in canoes the greater part of the Ever Glades, and became familiar with their peculiarities and character; but, as nearly six years have elapsed since I last crossed them, and as I have not in Washington my notes of the expeditions in which I shared, I fear that the information I can give you may seem somewhat meagre. The map of Florida published in 1846 (a copy of which you have kindly furnished me) will give a good idea of the extent of the Ever Glades, and an approximate idea of the position of their most important islands.

The Ever Glades seem a large basin of limestone, covered with pure fresh water, varying in depth from six inches to five feet; the rock, in many places bare, is generally covered with a pure vegetable deposit, producing a growth of rank, useless grass. Vast plains covered with this grass make up the greater portion of the Ever Glades. Innumerable islands are scattered over these plains, varying in extent from a few yards to many acres, and covered with a black soil of no great depth, but of remarkable richness. These islands are shaded by large trees of various kinds, and, where cultivated, appear to have amply rewarded the labors of the Indian and man. They seem to be constantly increasing in size, and observed in every stage of formation, from the first gath-

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may be

ering of soil around the roots of a few mangrove bushes, to the island covered with lofty trees, cultivated fields, and the villages of its Indian inhabitants. I have never visited the portions of the Ever Glades which approach lake Okechobee, and therefore will express no opinion as to the probability of their waters being drawn from the overflow of that lake. I can remember no spring in any part of the Ever Glades, nor do I think that the fall of rain would supply the water which is continually pouring itself into the sea through the numerous rivers on both sides of the peninsula.

The freshness of these rivers, the rapidity of their currents at all seasons, taken in connexion with the shallowness of the Ever Glades, abundantly prove that the bottom of these glades is considerably above the level of the sea. It may be well for me to state, in conclusion, that after observing the climate of the Ever Glades, at every season, I consider it one of the most healthy in the world.

I am, sir, very respectfully, yours,

C. R. P. RODGERS,

Lieutenant United States navy.

Hon. JAMES D. WESTCOTT.

No. 10.

Letter from A. H. Jones, esq., United States surveyor, to Buckingham Smith, esq.

ST. AUGUSTINE, EAST FLORIDA,

November 12, 1847.

SIR: In reply to your letter of inquiry upon the practicability of draining the Ever Glades, together with other questions connected with the same subject, I have to state that two years' professional labor, as a government surveyor in the country bordering the Ever Glades upon the Atlantic side, have rendered me well acquainted with its peculiar characteristics.

The scene of my operations has embraced the headwaters of the St. John's river and the country extending from Jupiter inlet to Lake Okechobee, thence south to the lower end of Lake Worth.

At the time of "working up" the country included between the Okechobee and the Atlantic, my instructions compelled me to extend my lines as far into the Ever Glades as was practicable; the whole being bounded on the west by the Ever Glades for the distance of 25 miles.

So far as I have understood the instructions given by the department to govern you in your reconnoissance, the most important facts to be ascertained are: 1st, to discover whether sufficient fall exists between the Atlantic, the gulf of Mexico, and these Glades, to make their drainage practicable.

2d. To ascertain the sources of the vast volume of water that periodically accumulates in the Ever Glades.

3d. If sufficient fall is found to effectually drain them, whether the quantity and quality of land capable of being reclaimed will guarantee the propriety of incurring the expense.

In answer to the first inquiry, I know of no actual level ever having been taken of this country, and am, therefore, only governed by an experience of five years as an engineer upon the canals of Pennsylvania and Ohio in stating my belief that a fall of *at least* 12 feet will be found upon a proper examination with instruments.

The numerous rivers that have their rise in the Ever Glades have a strong and permanent current until they meet tide water. The savannas that intersect each other through the pine woods extend from the rim of the Ever Glades to the Atlantic, thereby affording a vent also for the escape of the surplus water, during the rainy season, where the Ever Glades are overflowing.

The accumulation of water originates from two causes, viz: the actual fall of water over this wide extent of swamp land in the rainy season, which usually begins in May and continues until the last of June, and sometimes longer. It is also a reservoir into which flows all the surplus water of the surrounding country that falls for fifty miles north. The water that accumulates in the Kissime prairies and Tohopekaliga lake find a vent through the Kissime river into Okechobee lake, thence into the Ever Glades. This lake is a magnificent sheet of fresh water, having an extent of forty miles north and south, and a width of twenty miles. It has no regular outlet to the ocean or gulf, but looms south, gradually losing its borders amidst the saw-grass marshes of the Ever Glades, and is thereby proved to be an important auxiliary in keeping them constantly overflowed.

In relation to the quantity and quality of land capable of being reclaimed, I, of course, can only speak of such portions as I have examined. I never heard or read of so vast an accumulation of decayed vegetable substance as is found in the northeastern section of the Ever Glades. I frequently extended my lines for a mile or two into them when closing my township corners; and when placing posts and making embankments around them, I have thrust my Jacob staff (measuring 5 feet) with all ease up to the top, even then, apparently, not striking the under strata of sand or rock. Throughout the whole distance examined by me, this extraordinary deposit of decayed vegetable substance existed; the whole being covered by a very high and thick growth of saw-grass. This high grass is known to be of annual growth, so that in the course of time, if nature be allowed to take her own way, the marsh must eventually fill up from the continued decay of so vast a top growth. As it is now, however, it strikes the eye like the *outscrop* of creation, where nature has, as yet, only been half made up.

The most certain plan to be adopted effectually to drain this large extent of swamp land, would be to connect Lake Okechobee with the Miami river, by means of a ditch running through the heart of the Ever Glades, since that lake, as before stated, is the great res-

ervoir that constantly supplies the surrounding low lands with water. The fall properly made use of to inundate the surrounding swamp at the proper season, would furnish the largest extent of valuable rice land that could be found in the United States.

Ditches, simply running across the pine ridge from the rim of the Ever glades to the ocean, would not be sufficient; they must extend into the heart—tap the principal fountain, to make the drainage constant and sure. Otherwise, the accumulation of water in the rainy season would still exist, and the undertaking prove abortive.

The amount of good valuable land that could be thus reclaimed might exceed a million of acres, suitable to the growth of two of the most important products of southern agriculture, viz: sugarcane and rice. The extent of country adapted to their successful growth is limited in the United States, and it behooves our government, whenever it is in her power, to adopt such measures as are best calculated to advance and encourage their cultivation.

The practicability of draining the Ever Glades is, then, a subject of vast importance, not only to the prosperity of Florida, but the interests of the whole southern country, would receive an impetus in its successful accomplishment.

I do not hesitate to pronounce in its favor, and would recommend an early and more thorough examination with instruments, in order to obtain true scientific results.

Respectfully, yours, &c.,

A. H. JONES.

To BUCKINGHAM SMITH, Esq.

No. 11.

Memoranda from S. R. Mallory, Esq., Collector of Customs of the United States at Key West, to B. Smith, Esq., 1847.

KEY WEST, September, 1847.

The Ever Glades, extending from Jupiter Inlet, on the east, to the Caloosahatchee, on the west, and from thirty to fifty miles wide, are no more than what their Indian name, *Pah-hay-o-kee*, denotes, viz: "Grassy water." This immense grassy plain, covered in the wet season—i. e., from July to January—with an average depth of twenty-six inches water. Large fields of dense saw-grass shooting up from three to five feet in wet, and from six to eight in dry seasons, render the effort to penetrate it difficult, at all times, and impassable in very dry seasons. Canoes, or very light, narrow boats, are the proper means, at all times. The Ever Glades have never been topographically surveyed, or even carefully examined, though many persons have penetrated and crossed them. In all charts that I have seen, distances in them are overrated; which, I suppose, is the result of the labor and difficulty employed in getting through them, as compared with the time consumed; and also by the fact

that a haze, produced by the constant and great evaporation, always hangs over them, and gives objects the appearance of increased distance. The earth upon which these fields of saw-grass grow is a blackish mud, in places from two to eight feet deep, but frequently only eighteen inches or two feet; and the bottoms of the small gulleys or channels through which voyagers are compelled to pass are, in almost all cases, the hard, white limestone, against which the oar or pole sounds, ringingly, and rebounds. These channels, as a general rule, are from four to six feet deep, but many are found, for short distances, to be as deep as ten feet. The Ever Glades are studded with many islands, among which the two Pine islands, from four and a half to seven miles south of the south branch of New river and Sam Jones island, off Arch creek, are good specimens. To visit these islands, and all others in the Glades in the wet season, is to find but small pieces of land, free of water; but in the dry season, ten times the surface, perhaps, is exposed. I have always found that the ridges and beds of saw-grass were dense about these islands. On Sam Jones island, very rich hammock is found on its north side and where live-oaks, of immense age and size, may be found. These islands generally contain more or less rich land. The Ever Glades on the west and north are fringed with cypress swamp, in which they run, in wet seasons, to a depth of from twenty inches to three feet; and back of these swamps the pine land lies, down to the vicinity of the seaboard, on the eastern coast. A cane grass, of which cattle are very fond, grows in abundance at the margin of these Glades, between the pine and cypress lands. The piny woods are very rocky; the growth usually smaller than that of Alabama, Georgia, or Carolina, and the wood very knotty and pitchy, excellent for tar. In the neighborhood of New river, upon all its forks and branches, and between its two principal arms, there is much good land lying, in small, detached parcels, and upon which tropical fruits will readily grow; the cocoanut, lemon, and lime have been successfully tried. This, just about New river, is a fine country for a man with small means, say three or four hands, who wishes to be independent. The woods and streams abound with game and fish; frost is rarely seen; the *coomty* grows profusely, and its preparation is a bagatelle. The most indolent man I ever knew prospered there. New river bar may be crossed in four and a half feet, and, at times, more water. I have seen two large steamboats seven miles up. It runs parallel with the seacoast, in a direct line, and separated from the sea only by a ridge of land from seventy-five to two hundred and fifty yards wide, for five miles, and then branches off, the best branch being the left or south one; along which Fitzpatrick and Cooly were located, with others. Cooly's hammock, on the right side of this branch, is good land. The left side of this five mile stretch of New river is bordered by salt-marsh land, from one quarter to three-quarters of a mile wide. This land is worth an examination, as it is said to be rich. The pine woods are covered with the saw palmetto, and contain many ponds, low grounds, in which the water, during the wet seasons, collects. In all the streams emanating from

the Ever Glades, from Jupiter to the Miami, rapids are found near their junction with the Glades. These rapids are nothing more than water, running at about seven knots, in wet seasons over the elevated ledges of rocks, which there form the bottom, and are about from nine to twenty-eight inches deep. The land in the cypress swamps here appears to be neither rich nor deep; being, apparently, but pure silix, with an admixture of sediment. The good land of all this country, on the east side of the Glades, (the west shores have never been examined,) that which is always above water, and such as would invite the cultivator, from Jupiter to Key Biscayno bay, lies in small bodies, and is in small proportion to the poor land. A few good spots are found at the hunting ground, twelve miles below the Miami. It is a very easy matter to go from New river to the Miami, and thence to Shark river, on the west coast, through the Glades. An Indian may be procured at Fort Brooke, *Chico*, who can be relied on, for a small reward. But little fish or game can be found in the Glades, and no Indians live there.

Whether sound policy and expediency, keeping in view the expense and the lands to be reclaimed, dictate the attempt to drain these Ever Glades; and whether it be possible to accomplish it, to any considerable extent, are questions which a careful examination of the lands and streams, a knowledge of the quantity of water falling, per annum, and a connected system of levels, can only adjust or solve. I am not competent to express a valuable opinion; but I have been *in* the Glades and *about* them, from Jupiter to the Miami, much. I have ate of its fish, drank of its waters, smelt of its snakes and alligators, and waded through its mud to my middle for weeks, and am *au fait* upon all these; besides possessing some little acquaintance with its musquitoes and horse-flies, both of which can be recommended. I have also, together with a friend, taken soundings with poles, marked for the purpose, from our boats, for miles and miles; all of which labor might as well have been expended in surveying the moon. Doctor Lightner, my friend, was engaged in the botany of Florida, (a fertile field,) and was also anxious to establish or refute the practicability (not the policy) of draining the Glades. My own impression is, that large tracts of the Glades are fully as low as the adjoining sea, and can never be drained; that some lands around the margins may be recalimed by drainage or by dyking, but that it will be found wholly out of the question to drain all the Ever Glades. As the country now is, healthy and mild, with its good lands in small parcels, with water at hand anywhere for irrigation, I think it offers inducements to small capitalists, men with from one to ten hands, to go there and raise fruits. Fruit will grow well there.

S. R. M.

EVER GLADES.—*MS. of John Lee Williams, Esq.*

The Pay-hah-o-kee, or Grass-water, extends from $25^{\circ} 36'$ nearly to the 27° of north latitude, or about one hundred and twenty to one hundred and thirty miles long, and seventy miles at its widest part. It is bounded on the south by large islands which separate it from the Florida Keys; on the west by small islands and the Big Cypress swamp; on the north by pine islands and the Lochachee swamp; and on the east by large islands which separate it from the Atlantic. It is a large basin of water sprinkled with small islets, overgrown with saw-grass from four to six feet high. The average depth of water is from two to four feet, but cut up with many meandering channels of open water, sometimes not more than one foot wide, and in other places spreading into small ponds. In these channels have been discovered deep round holes of clear water. Whether these are springs or sink-holes is unknown. They, however, abound with fish and turtle, and sometimes, though rarely, they are haunted by the Manatee or sea-cow, a large shy amphibious animal. One of these animals was taken by Colonel Harney, which weighed eight or nine hundred pounds, and had a skin three quarters of an inch thick. They yield a large quantity of valuable oil, and their bones are an excellent substitute for ivory. The Ever Glades are based upon the soft limestone rock which we have before described as the substratum of the whole territory. Its elevation above the tide has not yet been accurately levelled, but is believed to be full twenty feet. The grass is so thick in some places, as to prevent the passage of canoes or boats. Generally speaking, however, the grass is much more sparse. Many of the islands are but little above the level of the water; but some of them are from two to three feet high, with a soil as rich as any that can be formed. Others are more sandy. The principal timber on most of the rich islands is live-oak, wild fig, papaya, and cabbage palmetto, thickly festooned with a great variety of vines. All the islands are surrounded with dense grass circles, from one hundred to five hundred yards wide. Boats can only approach the outward edge of this circle. A circle of mangroves is often formed inside of the grass. The Indians cultivate the inside of the islands only, leaving a border of live-oak and wild fig, which are very ornamental trees. The wild fig is, by the Spaniards, called Havi. It is a little fig about the size of a kernel of corn—a perfect fig in miniature. In their fields they plant corn, pumpkins, tobacco, squashes, melons, and lima beans in abundance. Cocoanuts, plantains, bananas, and sweet potatoes, are found on some of the islands. It is very probable that coffee would grow here, as frost never reaches these islands. Chitto-tus-te-nug-gee, or Snake-warrior, * * * * * took possession of an island about twenty miles west of Little river; had procured to be cleared about twenty acres of first rate land; built upon it two small towns, and drew to it, from Sam Jones's men, near sixty in-

habitants. About three miles west of Chitto's island is situated Tuscone's. It is inhabited by an Indian family, who have erected a few houses and cultivated some small fields of corn and cane. The island, cultivated and usually inhabited by Sam Jones, is about twenty miles west of Tuscone's. It is about half a mile long, but not quite so wide. It had three villages, and as many hunting grounds. Attached to this are many smaller islands, all cultivated for provisions, but no houses. Narrow channels of water separate them from each other. The old chief is said to have here seventy warriors; many of them with families. Most of these islands swarm with fleas, cock-roaches, and mosquitoes. A great many islands were found near there highly cultivated; but it is not probable that one-tenth part of the islands have ever been visited by the whites. On the southern route from the Miami river, and about forty miles from that stream, there is a beautiful island called Hocomothlacco. Around this island there is a circle of grass, or mud, four hundred yards wide. It is highly cultivated with provisions. Seven miles north and northwest of this lies Efanoc-co-qu-chee. This is not cultivated, but has some cleared land on it. It is used as a kind of caravansera, or stopping place, for boats on their route across the Big Cypress. Six miles northwest is Cochok-o-ne-ha-jo. This island is cleared and cultivated. It is near the center of the Glades. Six miles farther is In-tas-kee, a large island inhabited and richly cultivated. From this island the current passes to the east; after passing it, the current sets to the southwest. This circumstance gives credence to a statement made by a respectable gentleman who resides near the border of the Glades, and who has often visited them. He states that, not far from the center of the Ever Glades, there is an immense spring rising from the earth, covering an extent of several acres, and throwing up a large quantity of water with great force, and supplying the Ever Glades with all the water flowing through them. This is rendered somewhat probable, as the lake Okechobee receives two large rivers, (the Kis-sim-mee and Thloth to-pop-kohachee,) without any apparent outlet. The northeast part of the Ever Glades terminates in the Locha-hachee swamp.

No. 13.

BIG CYPRESS.—*MS. of John Lee Williams, Esq.*

The Big Cypress is a part of the Ever Glades grown up to timber land from the natural decay of vegetable matter. In passing west from the Ever Glades, for several miles, the grass is unmixed with bushes or water. The tall grass grows from mud, which becomes more firm as you proceed. Then comes clumps of bushes and clusters of cypress trees, which increase in size as you proceed west and north, until the swamp becomes a dense forest of large trees encircled with vines. This swamp extends thirty miles each way.

Here are scattered islands of hard ground, two feet above the waters of the swamp, covered with hard timber and vines of various descriptions, among which wind lagoons of clear water. These are drained by numerous small streams which pass under the mangrove bushes into the gulf. Among these islands, Sam Jones and the Prophet, as well as many of the Spanish Indians, have formed fields and villages, which were thought to be inaccessible to white men, until Colonel Belknap explored their haunts, and broke up their settlements.

No. 14.

Letter from Captain J. T. Sprague, United States Army, to B. Smith, esq.

FORT BROOK, FLORIDA,
December 4, 1847.

DEAR SIR: I have the pleasure to acknowledge your letter of October 10th, from Tallahassee.

I regret it is not in my power to give satisfactory answers to your various inquiries in relation to the Ever Glades and the surrounding country. During the campaign there in 1841 and 1842, I collected many facts from observation and experience, but, upon leaving St. Augustine, destroyed memorandums and notes, which I then thought would be of no use, as too cumbersome to be transported through the country, and to follow me in my various duties and changes of station. As the result of your investigation is to be embodied in a report, it is of the first importance that what is stated should be based upon accurate scientific data, consequently, I am unable to impart such information as would justify its embodiment in an official report.

I have no knowledge of any representation which General Worth made to the department upon the subject.

A work is being published by D. Appleton & Co., New York, entitled the "Origin, Progress, and Conclusion of the Florida war." In this there are a large number of reports made by army and navy officers during the operations in that quarter, and I have no doubt you would there find much available information.

Had I the data, I should take great pleasure in answering your inquiries, as it was a section of country peculiarly interesting, causing much speculation and many discussions among the officers engaged there.

I never supposed the country would excite an inquiry, other than as a hiding place for Indians, and, had it occurred to me that so great an undertaking, one so utterly impracticable, as draining the Ever Glades was to be discussed, I should not have destroyed the scratch of a pen upon a subject so fruitful, and which cannot be

understood but by those who have waded the water belly deep, and examined carefully the western coast by land and by water.

Very truly and respectfully, your obedient servant,

J. T. SPRAGUE.

To B. SMITH, Esq.,

St. Augustine.

No. 15.

Extract from a letter from R. R. Sewall, esq., to B. Smith, esq.

ST. AUGUSTINE, March, 1848.

DEAR SIR: After about an hours' run I discovered the "Black rocks,"—conspicuous land marks on the sound Shore of St. Lucie, and, about the same time, directly under right bow, the breakers of a reef of sunken rocks, half a mile distant, running parallel with the coast, with a passage between. This line of breakers furrowed the sea with foam, southward, as far as the eye could reach.

We ran in as near to the breakers as was prudent, and sailed along the outer edge of the surf some twenty-six miles, when from the appearance and the low lay of the land opening through a dense growth of vegetation, we judged there must be an entrance landward. Almost immediately afterward, I perceived an expanse of water winding through the green foliage of the trees, over the table land, toward the sea, and at, apparently, a considerable elevation, as viewed from the level of the sea. We stood in for this opening, crossing the surf over the reef, and, all sail being set, we shot across the breakers, grinding the shells a little, without damage or delay.

On nearing the shore we found a circuitous passage around the extreme southern point of Hutchinson's island, between it and a middle ground of quick sand, through which the water rushed with a force sufficient to turn a mill. The passage was shallow. The water set through with such power that we found it impossible to make our way into the river through it. We therefore anchored waiting the return of the tide.

I then landed to explore the waters above, and ascertain the entrance into St. Lucie sound, if any could be found. To my surprise the river, or inlet, opened by a straight channel into the sea, to the southward about a half a mile distant, and near one fourth of a mile wide, through which a vast body of water discharged itself into the ocean, with a deep and rapid current. This I ascertained to be the true and natural outlet of the St. Lucie river. Its mouth opens by a straight course around the extreme southern point of the reef of breakers, over which we had crossed into the *false bar* of an *arm* of the river, which, by the way, is fast filling up with sand.

The true entrance of the St. Lucie, is into a small, deep, and beautiful bay, formed by a curve in the northern extremity of Go-

mez island. This bay is a perfect crescent, into the northern horn of which the reef described above enters by a southeasterly course, which thus slightly protects the entrance by breaking the force of the sea from the northeast. The true entrance of this river seemed to be deep and navigable for large sized coasting vessels. At half tide, which rises some four feet, no breakers were on the bar, nor was there any surf except what the current of the water created, or might have done. I did not sound it out as I had not the proper means for so doing. Having thoroughly explored the channels leading up into the sound, we set sail, and without delay or difficulty, carrying from 6 to 12 feet water, we entered the sound with flying colors, supposing we were the first sailing vessel which had ever threaded the intricacies of St. Lucie sound from the sea.

On opening into the sound, the landscape was enchantingly wild and picturesque, diversified with islands of mangrove and rolling bluff shore, covered with dense groves of towering palmetto and oak. My eyes have looked on nothing comparable with it in this southern country.

The St. Lucie, from its junction with Jupiter narrows, by a straight, deep, and rapid channel, empties itself into St. Lucie bay. At the point of the junction of the narrows of St. Lucie, it immediately widens into a considerable expanse, interspersed with two or three large mangrove islands, around and through which the waters of the river have ploughed different channels.

The main channel winds along the south shore, and it is somewhat obstructed by old mangrove snags, around which sand is apt to accumulate in small shoals, but which might easily be removed, when it would be clear.

The body of water is very great which flows through this outlet into the sea with great rapidity, and which returns with a strong flood for a short distance. At the entrance of the sound there is an immediate expansion of water, miles in extent, over flats and shoals, intersected with a main and several smaller channels. There are a few mangrove islands covered with dense groves of large trees, which are perfect rookeries for various species of fowl.

The St. Lucie river, which enters the sound on the northwest side, is a very deep, broad stream, flowing with a sluggish current into the sound, whose waters are backed up behind the coast by that low strip of sand known as Hutchinson's island, and which for St. Lucie sound, a body of water 30 miles long and from 3 to 5 broad, across the lower extremity of which the river forces its way into the ocean, nearly opposite where it enters the sound, in about 27, 15, N. L. The St. Lucie river is a noble body of water, as wide as the St. John's below Jacksonville, and very deep. It seems to fall over a plain of slight inclination till it reaches the level of the sound, and then by a second and more rapid descent, till it falls into the sea. The banks on its north shore are precipitous. The water is bold, and the shore is lined with a hard species of sandstone and shell. It is of a firmer texture than the common *coquina*, and is of an earlier formation. A vessel of an hundred tons can lie alongside the shore and load, or discharge, by a wheel-

ing plank. This bank is covered with a dense growth of tropical trees, some of which are larger than I ever saw before, which for high rolling shell and sand soil, in that arid latitude, is singular.

The sound is bounded on the east by low but densely wooded mangrove shores, and on the west by a high rolling ridge, or bluff, fringed with a rocky border, out of which bubble numerous streamlets and springs of fresh water. Along this ridge the settlers have opened their clearings amid groves of oak, palmetto, and satin wood, which they have adorned with that primitive shelter from wind and weather, the "log cabin." They have settled on the northern rustic plan of small farms. The soil is grey shell and sand, with vegetable loam. The growth upon it is dense and vigorous. The settlers are engaged in the culture of tropical fruits, and in the turtle fishery. All are endeavoring to get in pine-apple plants, as these promise to do well. There will be grown several hundred during the ensuing season. There were some thirty or forty grown the last summer. I saw the plant growing, also the cocoa nut tree, the guava, lemon, lime, orange, &c. I ate of the fruit of the banana grown there. I saw the tamarind tree also growing in the open air. The pawpaw grows wild, and the imported West India species grows well.

The growth of tropical fruits and plants is no longer an experiment. The Sisal hemp plant is found wild. Sugar cane matures and tassels like corn, a yard long. The juices are fine and full of saccharine matter of good quality, if I may judge of the syrup manufactured there from it. It is altogether the most interesting section of the south, in my opinion; and a little fostering of government in the way of affording communications along the coast, and in introducing from tropical countries rich and rare seed and plants, will soon make it a populous and thrifty region. Why cannot a cutter be ordered to the Bahamas, to bring in there a supply of fresh plants of the pine-apple.

In respect to your question as to a former town, I have to answer that I saw no ruins. The region has the appearance of having been formerly settled and cultivated. The growth is not I believe the original. There is said to be a field of the chocolate cocoa now growing there. There are appearance of ancient plantations or fields. But my exploration was not extensive enough to discover what you have alluded to; if there were ruins still to be found. St. Lucie point is the natural site of a town, which will be again so occupied when the country shall be settled up. A most delightful site it is, something like Savannah bluff. This is the terminal point of East Florida main, and it is the nearest point for commercial intercourse, across the peninsula, with the gulf, through lake Okechobee and Caloosahatchee river, which now forms a water communication between the lake and the gulf of Mexico, and 20 or 30 miles of rail-road or canal to the head waters of St. Lucie will unite the gulf and the Atlantic. Nature has already, through the Caloosahatchee, accomplished two thirds of a water communication. What an enterprize of profit and interest, to open here

by a straight course, a channel for trade by which the dangers of the reefs of the Florida archipelago might be avoided.

I should have been pleased to make a thorough exploration of this country to lake Okeechobee, and I have no doubt but that reservoir of waters may be diminished by a connexion with the sea, through the St. Lucie river, and for reasons which are to my mind satisfactory, inasmuch as the level of the water of the ocean, at this point, it is not only below that of the lake, but below that of the gulf on the opposite side.

R. R. SEWALL.

To B. SMITH, Esq.

No. 16.

Letter from George Mackay, esq., United States surveyor, to B. Smith, esq.

FLORIDA, December 6, 1847.

SIR: In compliance with your request, to furnish you with such data as I may possess in relation to the practicability of draining the Ever Glades of Florida, I must refer you to other communications that I have made on the subject, and can only say that, without a proper survey or examination, no certainty can be arrived at as to the extent of the fall of water, or the feasibility of effective reclamation.

Although I executed the public surveys upon the eastern margin of these Glades, and extended the township lines into them every six miles, for nearly a hundred miles, yet so different were the observations and conclusions attending the termination of each of these lines, it was with much difficulty, and, indeed, not until I had completed the whole survey, that I formed an opinion that a large portion of them might be drained. They may be divided into north and south Ever Glades, distinctive in their general character, as may be readily discovered in traversing their rim or shore. In the region southwest of the head currents of the Miami river, when the rainy season had made the water superabundant, I observed that there were currents and counter-currents running in every direction, frequently quite rapid, and in the dry season I found that the course of these currents was owing to numerous rock basins, in many instances perforated with holes in the bottom like a culender, into which these currents poured and disappeared; and in the pine woods, between these Glades and the Bay Biscayne, may often be heard the rippling sound of running water, and frequently, in the fissures of the rock, it may be seen at from six to eight feet below the general surface of the ground; and there are springs in the midst of the bay, where, by very indifferent means to shut out the salt water, pure fresh water has been raised three or four feet above the surface of the ocean; taken in connexion with the falls of the Miami river, which came under your immediate observation, together with the facts of the difference of elevation between the

Gulf of Mexico and the Gulf of Florida, and that there are large rivers running into both gulfs, and that the waters generally in the Glades do not rise above twenty inches, no reasonable man can doubt a considerable fall of water to the ocean. Passing from these southern Glades, which have generally a rocky surface or foundation, to the head currents of New river, large islands, extending to the westward, covered with a variety of timber, by their continuous succession, seem to be a sort of barrier or terminus of the rocky Glades. Here begin the groves of cypress upon the rim or margin, and a more general uniformity of surface and depth of water throughout. Here also begins the appearance of regular channels, which seem to have been cut off from their confluence with the ocean by the cypress groves extending across and forming an impassable dam for several miles.

There is a point in this region which appears to have been one of the main outlets of the basin, which must have commenced damming some centuries ago, and by a succession of rains and droughts, so filled it up with decayed vegetation, that whenever the water rises above a certain height, it rushes through the cypress, or falls, generally, over the margin like a flowing bowl, and passes, by way of the lagoons, to the sea. This is, perhaps, the most interesting point that I can bring to your notice. A broad channel, about $1\frac{1}{4}$ of a mile wide, with fresh-water grass, evidently filling up, commences directly underneath this cypress dam, and has its outlet into Hillsborough and New river lagoons. After passing Snook creek, and still further north, the pine woods and the Ever Glades are more intimately associated for several miles, when the cypress again commences, and continues, without interruption, with one exception, to the Okechobee. This exception is a channel of considerable magnitude, communicating about midway of lake Worth, but now grown up with cypress, or filled with saw-grass; yet the waters seem still to find some passage to lake Worth, which is fresh water, extending along parallel with the sea, and at many points not more than thirty yards distant, having a discharge into the Eb-ten-e-hatch-ee and Jupiter bay.

I was forcibly impressed with the peculiarity of the southern glades—a vast rock of interstices and partitions something in the form of a honey-comb—the interstices or cells filled with soil, saw-grass, or water, are barren, and varying from one acre to twenty thousand acres or more, the partition varying from one chain to one mile wide, barren, with islands of trees, traversable with canoes in high water, and upon horseback in low water; the whole presenting the most romantic view of grass prairie and water, with gems of islands of rare timber and shrubbery.

Very little can be known of the north Glades. They are uniformly saw-grass; it is impossible to penetrate them with canoes in high water, and in low water, they are so generally boggy, it is impossible to explore them on foot. They are universally bespan- gled with myrtle and willow and coesplum clumps of bushes.

On the subject of the settlement of the islands of the Ever Glades, I saw nothing that indicated civilization, excepting upon a

small island at the head of the Miami river, where are to be seen the fallen walls of a stone building, broken earthenware, and bottles of a shape I have never before seen, and of an age I will not venture to determine.

If the foregoing can be of any service to you, I shall be gratified. I have endeavored to take as general a view as the information I possess will admit. Taking into consideration the many millions of acres included in the basin, and the probability that the islands, at least, can be perfectly reclaimed, and the productions of a tropical climate encouraged, upon your report and the report of those that have preceded you, the government will, at least, deem it of sufficient importance to warrant a complete hydrographical and agricultural survey.

I am, sir, very respectfully, your obedient servant,

GEORGE MACKAY.

BUCKINGHAM SMITH, Esq.

No. 17.

Letter from Major W. H. Chase, U. S. A., corps of engineers, to Hon. J. D. Westcott.

WASHINGTON, August, 1848.

MY DEAR SIR: I have read the letters and memoranda which you placed in my hands relating to the Ever Glades of Florida.

These papers, authorized by engineers, surveyors, and other observers, cannot fail to be interesting to those who have given thought to the subject.

The opinions of all these are almost unanimous as to the practicability of draining this portion of Florida. By taking these opinions, then, and adding to them my own observations made at and near the Miami river, I cannot fail to arrive at the conclusion that a system of drainage, adopted after a careful survey had been made of the country, would result in reclaiming, perhaps, one million of acres of land, a part of which would be suitable to the culture, not only of the great staples of cotton, sugar, rice, and tobacco, but possibly of coffee, and certainly of most of the tropical fruits.

With the exception of a single line of levels run by Capt. Vinton, of the army, no accurate measurement on this score has been made; so that the heights of the basin above the Atlantic, expressed in the various estimates, are entirely conjectural.

The line of levels, however, run by Captain Vinton, showing the elevation of the Glades to be some 10 feet or more higher than the sea, is surprisingly coincident with the opinions expressed by the various writers on the subject, affording, in this way, much encouragement for the prosecution of systematic surveys, by which the truth may be brought out.

I will not dwell here upon the great advantages that would ac-

crue to the United States in general, and to the State of Florida especially, if the drainage of the Ever Glades could be effected; and I will content myself by saying that the strategic positions in the Florida straits would be relieved at once of the only disadvantage they labor under, could the southern portion of Florida be brought within the pale of cultivation; for ample supplies of every possible description, required for the food of an army, would then be drawn thence without hindrance from an enemy.

The ownership of this large extent of country is now in the Indian tribes inhabiting it under the tutelage of the United States.

The question is, whether, as the owner or guardian of these and other lands, the government of the United States would depart from the policy hitherto pursued by it, and engage in a system of improvement of the public domain, in which the Ever Glades would be included. I think the answer to this question is an easy one, to wit: that the almost indefinite cost to which such improvement might be carried, if once commenced, would forbid the idea of the government's engaging in it.

Failing, then, the action of the United States in the premises, the large extent of land embraced by the Ever Glades, as well as that embraced by the annual overflow of the Mississippi and its tributaries, must forever remain a wilderness, unless a new disposition is made. What better disposition could be made than by ceding these lands to the States embracing them? What would be the result (supposing always the Indian title extinguished) of such a cession? The States, being directly interested in these lands, would set about surveys of the same; and, guided by a prudent foresight, would engage in improvements, if the result of the surveys justified it. The States would probably pursue the same course, in this respect, as is followed by North Carolina towards its considerable landed domain.

In the event of success, whilst the States in which the land lays would be amply remunerated, the United States would be doubly so by increased productions, not only in quantity, but variety. *Indeed, it might then be claimed that nothing that any other climate produced could not be produced within the limits of "the present United States."*

I am, very truly, your obedient servant,

WM. H. CHASE.

The Hon. J. D. WESTCOTT,

Of the United States Senate, Washington.

No. 18.

Letter from Hon. J. D. Westcott to Secretary of the Treasury.

WASHINGTON, May 11, 1847.

SIR: Referring to the conversations I have had with you, and the letters I have written on the subject of measures being adopted by the government to reclaim the vast quantity of valuable lands on the peninsula of Florida, called the "Ever Glades," now submerged by fresh water, I will recapitulate my views as to the incipient steps advisable to be taken. You have the opinions of that intelligent and able gentleman, and practical engineer, Gen. Gadsden, in a letter addressed to you at my request. He has promised to give them more particularly and in detail. This subject has, since 1822, attracted no little attention in Florida. Years before the cession the project was partially attempted by the Spaniards, but was not carried out, because those who undertook it were not competent to the task. General Charles F. Mercer, of Virginia, some years ago examined the subject, and wrote an elaborate essay for the public prints, setting forth the advantages of the measure to the country. Petitions have been repeatedly proposed to our local legislature for its aid, and it has more than once passed resolutions invoking the action of the general government to effect the reclaiming of those lands. I have before enclosed to you a printed copy, as laid before Congress, of those adopted at a recent session. The project has been favorably referred to in more than one official report of United States officers on duty in Florida. General Gadsden, more than twenty years ago, noticed it approvingly. General Worth, or the late Lieutenant Blake, topographical engineer, and others of high reputation, have, I believe, called the attention of the government to it in official correspondence or reports. I have caused maps and plats, exhibiting the general character of that region, and of the face of the country, to be submitted to you, from which you can, I think, form a pretty safe opinion of the practicability of the plan proposed. I am no engineer—know but little of such matters, but any man can venture to decide that if, as is alleged, the waters in the gulf or straits of Florida opposite the Ever Glades are some 6, 7, or 8, and perhaps 10 feet, *below* the waters in the Glades, and that the *general* depth of the waters in the Glades, when there is no freshet, is but from one to five feet, except in channels and some deep ponds across the peninsula; and that the distance from the edge of the Glades to the shores of the Florida straits is in many places less than six miles; and that the actual distance to the heads of several navigable streams emptying into the straits is not more than a mile; and that the narrow ridge which separates them from the waters of the Glades is of soft coral rock, requiring excavation, easily made, of but ten or twelve feet at most to unite the fresh and salt waters, and drain the lands in the Glades, the scheme is feasible and without very great risk. What would be the value of the now subaqueous lands, reclaimed

by such work, I will not pretend to say. Of course it would depend on their quality. As to this, I rely greatly on the representations of the Hon. John P. Baldwin, Colonel Wm. F. English, Colonel Richard Fitzpatrick, and George McKay, esq., all of whom have resided in their vicinity, and who have repeatedly informed me that many of them would be the best sugar and rice lands in the United States. I believe they would, at all events, give us the *desideratum* of lands that could enable us to rear the tropical fruits we now import from Cuba and the West Indies, even if not sufficiently fertile for, or adapted to, rice or sugar. Their being reclaimed would also occasion settlements to be made at least on some of them, and it is important for the country that South Florida should be densely populated. All the gentlemen I have last above named are of the highest respectability and intelligence, and Mr. McKay is an United States surveyor, who surveyed most of the contiguous coast of the Atlantic or straits, and up to the margin or "*rim of the basin*" of the Glades. Doubtless, on draining the vast lake, called the Ever Glades—nearly ninety miles in length, and from fifty to seventy in breadth—interspersed with islands, and what are now bogs or morasses, there would be left rivers and channels running through it, and some of the spongy morasses might be irreclaimable for any valuable purpose for years hence. Doubtless, too, the sudden exposure of such a vast extent of soil, so long covered with fresh water, to the action of an almost vertical sun, and the immense quantity of dead fish and vegetable substances thereby exposed to decomposition upon it, might occasion temporary pestilence in its neighborhood, but it would probably not extend beyond one season, and could be guarded against; and this, in fact, furnishes a reason why the work should be done before many settlements are made on the coast. The quantity of lands that would probably be reclaimed has been variously estimated from one to two or even three millions of acres, and indeed more. I do not consider it practicable to estimate it at anything like certainty.

The waters in the Gulf of Mexico opposite the Glades are said to be considerably below those in the Glades, but not so much as the waters of the straits. It is also said they sometimes mingle through the lagoons and creeks in the bayous and coves above Cape Sable and below the northwest point of Charlotte harbor. If so, it is not a chimerical idea to anticipate a cut from the gulf to the Glades would effect a channel, for at least small coasting vessels and steamboats, through that part of the peninsula at comparatively small expense; and it is not improbable that passes on the gulf coast may have to be stopped, and the shore in some places *leveed*, to promote this object, and aid in the keeping such channel open.

A rough general estimate of all the expense of the proposed measure, made by persons more competent than I am, is, that \$250,000, at the outside, would effect the draining of the lands, by "knocking out the heads of a few rivers," near the Glades, that empty into the straits; and if even 500,000 acres (about twenty-five townships,

or thirty miles square of land only) was reclaimed, it would more than double, treble, or quadruple the expense. I may be wrong in all these anticipations, but I think they are correct. It can be no possible advantage for me to have this measure adopted if unwise, and especially by any misrepresentations to the government; and, on the contrary, if it fails from impracticability, I shall meet with ridicule for proposing and urging it; and, if I could knowingly deceive the government to effect it, I should, and justly, meet with censure.

Now, sir, under this responsibility I do not hesitate to say that I regard it important that this work should be undertaken and completed as soon as possible. It is decidedly advisable that the government should satisfy itself, send an agent to make a *reconnaissance* of these lands, and make report as to the probable practicability of the work, to be laid before Congress at its next session. I do not hesitate to say, that for this agency I should have preferred an intelligent and influential citizen, not a Floridian, whose testimony could be relied on as disinterested and impartial, who would not be suspected of having any views of speculation, or of being influenced by local interests, and who would have aided in furthering the measure before Congress; but as you regard it as well to select a Floridian, I will, as you have intimated, name to you several gentlemen, the appointment of either of whom will be creditable to the government. They are all firm friends of the administration. All of them, except Colonel Whitner, have repeatedly been members of our local legislature; and the two first named, speakers of the popular branch. Buckingham Smith, esq., of St. Augustine, Isaac Ferguson, jr., esq., or General Abraham K. Allison, of Quincy, Colonel Robert J. Floyd, of Apalachicola, or Hon. Hugh Archer, or Colonel B. F. Whitner, of Tallahassee, are gentlemen, any one of whom I can recommend as above.

The agent can be appointed to examine the land offices at St. Augustine, at Newnansville, and at Tallahassee, under the 14th section of the act of March 20, 1804, or under the sub-treasury act, as the ostensible duty; and, in addition to his ordinary instructions as to such duty, he can be instructed to perform the service of examining these lands, &c., if he accepts the appointment, and without additional pay. There are no means of conveyance to the Ever Glades from the upper country that can be relied on. It is generally water conveyance; consequently, a cutter or other small public vessel should be sent for the agent—if from the Gulf of Mexico to St. Marks, and if from the Atlantic side to St. Augustine—to be at the point by 15th or 20th June proximo, and to be instructed to proceed with the agent, and some two or three citizens he may invite to assist him in his explorations, and I doubt not several would embrace the opportunity, and, if I could possibly do so, it would be agreeable to me to accompany him to the Ever Glades. If the vessel sails from St. Marks, he will go to the south part of the peninsula, and tarry till the examination is made, and go from thence to St. Augustine. If she sails in the first place from St. Augustine, she will go down to Cape Florida to

make the examination, and from thence to St. Marks. The exploration will probably take 30 days from the first to the last port. The captain should be instructed to aid in the explorations, and to yield his boats and hands to assist the agents.

The agent should be instructed to ascertain the level of the respective waters of the Glades; of the gulf or straits of Florida opposite them, and of the Gulf of Mexico opposite to them, as nearly as practicable; the mean depth of the water on the lands now submerged in the Glades; the graduations at different seasons; the probable quantity and the character and quality and value of the lands that can probably be reclaimed; their locality; the most practicable mode of reclaiming them; and the expense, all with *data*, and the information on which said *data* may be founded, to *prove* the correctness of his estimates; and likewise such other general information that may be useful to the government in acting on this subject, or otherwise in relation to that region of country. I enclose to you three maps that I have had copied at your request, that should be sent to the agent to aid him, and, if it can be done, he should be loaned levelling and surveying instruments from this place. I have reiterated my suggestion to examine all three of the land offices in Florida, as it will occasion *no additional expense* whatever, and as *that duty* should be performed as to those offices. If the vessel meets the agent at St. Marks, he can examine Tallahassee (only 23 miles off) *first* before being carried down to and round the cape, and, after the *reconnoissance* of the Glades, she can go to St. Augustine, and be there discharged, and the agent can go to Newnansville (but two days ride) by land. If he is taken on board at St. Augustine, she can go round (stopping at Cape Florida and Key West, if need be,) and thence up to St. Marks, and the agent after examining the office at Tallahassee can visit Newnansville on his way back by land to St. Augustine. Portions of the Ever Glades are in both of the districts of St. Augustine and Newnansville. I feel, however, no anxiety respecting *my* suggestions being adopted, and will cheerfully yield them to any others deemed as good. All I am anxious for, is to forward the measure.

I deem it proper (and I take great pleasure in so doing) to express my acknowledgments for the manifestations by you in relation to this subject of proper liberal feelings, and the display of an enlightened and patriotic forecast, and the more so, as I have not witnessed it in other quarters, as I expected, towards my State and with respect to her interests.

I assure you of my high respect, your obedient servant,

JAMES D. WESTCOTT, JR.

Hon. R. J. WALKER,

Secretary of the Treasury.

No. 19.

Instructions to B. Smith, Esq.

TREASURY DEPARTMENT,

June 18, 1847.

SIR: You are hereby designated, under the eleventh section of the act of Congress of August 6, 1846, "providing for the better organization of the Treasury Department, and for the collection, safe-keeping, transfer, and disbursement of the public revenue," an agent to examine the land offices at Tallahassee, Newnansville, and St. Augustine, in the State of Florida; said examination to be prosecuted and completed with all convenient despatch, and to be concluded before the first day of November next, and full report thereof made to this department.

You will make a thorough examination of the records, books, files, accounts, and returns of the said offices above named, and of the moneys in the hands of the receivers respectively, and of the manner in which it is kept and protected, to the end that uniformity and accuracy in the accounts, as well as the safety of the public moneys, may be secured thereby.

To aid you in directing such examination, you will receive, herewith, a copy of said act of Congress, and of the circulars and instructions which have been issued to receivers under the same, and other official documents.

Your compensation, while on this service, will be at the rate of six dollars per diem, and mileage at the rate of ten cents per mile, from your residence at St. Augustine to the land office at Tallahassee, via Newnansville, and back again. No allowance can be made, under the law, for any incidental expenses. The several land officers will afford you every facility in conducting said examination, and in obtaining the requisite information to make your report, in all the particulars indicated herein, as complete and authentic as practicable, and will render you, also, their personal aid. You are also authorized to require from them such clerical assistance as may be in their offices, which you may deem necessary, and copies of any papers or maps that you may regard essential.

Connected with the service above mentioned, if you accept this agency, it will be expected and required that, without any additional compensation to that above specified, you will ascertain, as nearly as practicable, and make report to this department:

1. The aggregate quantity of lands surveyed in each of the said districts, and a general designation of its location; and such quantity yet unsurveyed, and such quantity deemed not worth surveying, or that it is at this time impracticable to survey, and the causes thereof. To procure this information, you may find it necessary to apply to the surveyor general of Florida, who will, upon your showing him this communication, aid you by furnishing all such data, copies of maps, &c., as his office contains, and as

may be deemed necessary by you, to fulfil any of the instructions hereby given.

2. You will ascertain the aggregate quantity of lands in each district heretofore offered for sale, and a general designation of its location; and the quantity deemed worthless, and which it is probable will never be sold at the present *minimum* legal price. The estimates of the different officers you will have made separately, and you will make your own, correcting anything you may deem erroneous in the others. The estimates and opinions of intelligent citizens, if procured by you in writing, will be regarded as entitled to consideration, and will be communicated by you with your report.

3. You will report any other information that you may obtain with respect to the public lands in Florida, the measures that should be adopted to effect their profitable disposition, as directed by law, at an early period as is practicable, and as will be most beneficial to the country; and also with respect to the various reservations of public lands, for public uses and purposes, in the State of Florida. Although data of an official character as to these subjects is to be found in the archives here, from which estimates may be made, it is desirable, for greater certainty, to have information from other sources, whether for confirmation, or, if errors are found upon comparison, for correction.

4. But the most important service expected of you is the procurement of authentic information in relation to what are generally called the "Ever Glades" on the peninsula of Florida.

It has been represented to the department that there are several millions of acres of public lands in the vast lake called by that name, and which can be reclaimed and rendered valuable at an expense comparatively small with the advantages resulting from such measure. It is represented that these lands can be drained by two or three small canals, from the lake into the rivers opposite to it, emptying into the Gulf of Mexico, and into the straits of Florida. Copies of sundry communications to this department on this subject are enclosed to you. They are for your own consideration, and to be returned to the department with your report. You will please give them an attentive perusal, with a view in your report of correcting any errors of fact or opinion they may contain. The legislature of the State of Florida has, by resolution, asked the action of the federal government in relation to draining these lands. This department is not in possession of any official information in relation to them which would justify its recommendation of such measure; but the opinion is entertained, from the representations made, that the measure is not only practicable, but would be beneficial to the public interests. The department relies upon you to procure and furnish, in your report, full information on this subject. It is expected that you will visit personally, and make a reconnoissance of that section of the peninsula. You are herewith furnished sundry maps, charts, &c., of portions of it, some of which, though not regarded as entirely correct, may still be of service to you. You are not expected to make a survey of the

country, either topographical or otherwise, but it is desired that your reconnoissance should be as full and complete as practicable.

You can doubtless (without ascertainment by instruments of the *levels*) approximate to the relative elevation of the waters in the rivers on the gulf and Atlantic coasts, opposite to the Ever Glades, with the waters in the Ever Glades; and you can ascertain pretty correctly the general depth of the water in the lake, and the probable quantity of land that can be reclaimed by draining it by canals into those rivers. You can ascertain the opinions of intelligent persons, and you can obtain data for the formation of your own opinion, as to the quality of those lands so susceptible of being reclaimed, and their value, and their adaptation to the cultivation of different products. You will particularly specify those products. This information will be important. You will examine personally, if you can, the region where the proposed cuts will have to be made; state its character; geological formation; the probable length and breadth and depth of the proposed cuts or canals; the probable excavation necessary, and also the character and anticipated expense and results of the work sought to be undertaken. Any information that you can obtain in writing, from intelligent citizens acquainted with this subject, you will communicate with your report; and you will seek from them facts and specific data showing the grounds of opinions that may be given. It is to these, rather than mere opinions, that Congress and the department must look to justify action on any subject.

You will report to this department such data as you may obtain in regard to the most proper place for the location of an additional land office, towards the southern part of the peninsula of Florida, if Congress should deem it advisable to provide therefor.

Any information with respect to subjects under the control or supervision of this department, referred to in any of the enclosed documents, you will give, if convenient, with your report, and your suggestions will receive consideration.

If you accept this agency, you will advise the department thereof forthwith. If you decline it, please return the enclosed documents by return mail. If you accept it, the department will endeavor to furnish you with facilities for visiting the Ever Glades by water, and making the necessary examinations either by vessel from St. Mark's or St. Augustine, as may be in its power, and I shall be glad to hear from you as to which will be most convenient, and as to your arrangements. As it is not certain that the department can have the choice of ports to send a vessel to, for your service immediately, you will make such arrangements for both ports, and inform the department thereof forthwith, so that no delay or embarrassment may arise whichever port is selected.

You will carefully avoid in your examinations making any intrusions upon the Indian reservation, which might alarm the Indians and create excitement.

The department relies with confidence on your impartial fulfillment of this service, free from any sectional or local predilections, and that your report will confirm the character for intelligence

has received in relation to you from your friends of different sections of the Union.

I am, sir, very respectfully, your obedient servant,

R. J. WALKER,
Secretary of the Treasury.

BUCKINGHAM SMITH, Esq.,
St. Augustine, East Florida.

No. 20.

Instructions to Lieutenant Martin.

TREASURY DEPARTMENT, *July 16, 1847.*

SIR: On receipt of this letter, you will provide the Wolcott with a flat bottomed boat or batteau, of very light draught, and capable of carrying at least six persons in safety, and taking on board a supply of provisions for two months. You will repair with the vessel without delay to Key West by the most direct route, where you will inquire of the collector for letters addressed to Buckingham Smith, esq. Should none be there, you will not detain the vessel, but proceed without them to St. Augustine. You are authorized to engage at the established rate of compensation, a pilot fully acquainted with the navigation of the coast of Florida and the Ever Glades.

At St. Augustine you will receive on board Mr. Smith, as passenger, with such gentlemen, say three or four, as he may desire to accompany him as assistants, and as your vessel can conveniently accommodate.

You will furnish them, while on board, with all the accommodation in your power, they, of course, making the necessary arrangements with you for their subsistence.

Having made the required arrangements, you will proceed to such point or points on the peninsula of Florida as may be designated by Mr. Smith, and afford him every possible aid with your men and boats in the performance of certain duties assigned to him, according to the instructions which he will exhibit to you.

You will remain at such points as he may desire, such time as he may deem necessary to accomplish the objects of his agency, when you will return to St. Mark's or St. Augustine, as he may desire, to land him, when you will return forthwith to Mobile, from which place you will report by the 20th of October, at farthest. Should any additional provisions be required, they may be procured at Key West. In assigning you to this duty, great confidence is reposed in your zeal as well as in your ability to carry out the views of the department, and it may not be irrelevant to remark that much depends upon your cordial co-operation with the gentleman with whom you will be associated.

I am, sir, very respectfully, your obedient servant,

R. J. WALKER,
Secretary of the Treasury.

Lieutenant FRANCIS MARTIN, *Ala.*

U. S. Rev. Marine, Mobile, Ala.

Resolutions passed by the Legislature of Florida, recommending the adoption of measures for reclaiming the Ever Glade lands in that State.

PREAMBLE and RESOLUTION in relation to the Ever Glades of Florida.

Whereas there is a vast and extensive region, commonly termed the Ever Glades, in the southern section of this State, embracing no inconsiderable portion of its entire peninsula, which has hitherto been regarded as wholly valueless in consequence of being covered by water at stated periods of the year, and the supposed impracticability of draining it. And whereas recent information, derived from the most respectable sources, has induced the belief, which is daily strengthening, that these opinions are without foundation, and, on the contrary, that at a comparatively small expense the aforesaid region can be entirely reclaimed; thus opening to the habitation of man an immense and hitherto unexplored domain, perhaps not surpassed in fertility and every natural advantage by any other on the globe. And whereas it is no less the interest of the general government than of Florida, with its vast donation of unlocated land, to adopt some early and efficient measures to test the accuracy of these representations:

Be it therefore resolved by the Senate and House of Representatives in General Assembly convened, That our Senators in Congress be instructed, and our Representative requested, to bring this important subject to the attention of Congress at the earliest day, and earnestly press upon its consideration the propriety and policy of forthwith appointing competent engineers to examine and survey the aforesaid region.

Resolved, That immediately upon their passage and approval, his excellency the governor be requested to transmit to the persons above named, to the Commissioner of the General Land Office, and to the President of the United States, certified copies of the foregoing preamble and resolution, and to communicate with the latter officer, and furnish him with all the information in his possession in reference to a subject of deep interest to the general government as well as to our own.

[Passed by the Senate, December 2d, 1845. Passed by the House of Representatives, December 4, 1845. Adopted by the governor, December 10, 1845.]

STATE OF FLORIDA:

I, James T. Archer, Secretary of State of the State aforesaid, do hereby certify that the foregoing contains a true transcript from the preamble and resolutions in my said office.

Witness my hand and the great seal of the State of Florida, at the capitol, in Tallahassee, this eleventh day of December A. D. 1845, and 70th year of American independence.

JAMES T. ARCHER,

Secretary of State, Florida.

No. 23.

Resolution of the Legislature of Florida.

STATE OF FLORIDA.

RESOLUTION in relation to draining the Ever Glades.

Whereas, large tracts of the public lands lying in the vicinity of lake Okee-cho-bee, and in that region south of said lake, called "The Ever Glades," being covered with water, are incapable of being surveyed and subdivided, and are therefore valueless to the United States: And whereas, it is believed that a large portion of said lands may be drained by canals, reclaimed, and made valuable for the cultivation of tropical plants and fruits: And whereas, it is believed that these lands, if reclaimed, would not only remunerate this State for the expense of such reclamation, but would yield a considerable surplus above such expense. Therefore—

Resolved by the Senate and House of Representatives of the State of Florida in General Assembly convened, That Congress be requested to grant to this State all of said lands lying south of Carlosa Hatchee river and of the northern shore of lake Okee-cho-bee, and between the Gulf of Mexico and the Atlantic ocean, on condition that the State will drain them, and apply the proceeds of the sale thereof, after defraying the expense of draining, to purposes of education.

Passed the Senate, December 30, 1847.

C. W. DOWNING,
Secretary of the Senate.

D. G. McLEAN,
President of the Senate.

Passed the House of Representatives, January 6, 1848.

W. B. LANCASTER,
Clerk House of Representatives.

JOHN CHAIN,
Speaker House of Representatives.

Approved, January 6, 1848.

W. D. MOSELEY.

STATE OF FLORIDA:

I, James T. Archer, Secretary of State of Florida, do hereby certify that the foregoing is a correct transcript of a resolution on file in my office, entitled "Resolution in relation to draining the Ever Glades."

Witness my official signature, and the great seal of the State
[L. s.] aforesaid, at Tallahassee, this 22d day of February, A.
D. 1848.

JAMES T. ARCHER,
Secretary of State.

No. 23.

LEGISLATURE OF THE TERRITORY OF FLORIDA.

HOUSE OF REPRESENTATIVES,
Session of 1845.

Mr. LORING, from the Committee on the state of the Territory, made the following report :

The committee to whom was referred a resolution instructing them "to inquire into the expediency of memorializing Congress in favor of giving encouragement to settlers on the unsurveyed lands of the United States in the southern section of the peninsula, and on the keys, who will engage in the cultivation of tropical plants and fruits, and in the making of arrow-root, and other products peculiar to that region," beg leave to

REPORT:

That the adaptation of the chief part of such of the peninsula of Florida, and some of the islands and keys lying south of $26\frac{1}{2}$ degrees of north latitude, for the successful cultivation of most of the tropical productions enumerated in the schedule annexed to this report, has been tested by actual experiment since 1829. That extensive plantations, worked by a slave force, cannot be established with profit in that part of Florida, within the limits designated, every one acquainted with it must concede. The lands, excepting small narrow strips of hammock on the margins of the water courses, generally insufficient for an ordinary cotton or sugar or rice plantation, are a light and sandy alluvial, with vegetable deposite on limestone rock, which is but a short distance below the surface, and often found on it so as to obstruct the cultivation. On the borders of the water courses, and adjacent to those for short distances, the timber is often luxuriant in growth and of various kinds, and the undergrowth is exceedingly thick, while in the interior there is rarely to be seen any thing but ponds in wet seasons, which are prairies in dry, surrounded by fine forests. These lands will not repay to the government the expense of surveys. In fact, they will never average five cents per acre. The best and most select portions, mostly in small tracts, not exceeding 160 acres, will not sell for more than the present legal *minimum* price of \$1 25 per acre, demanded by the United States. If the general government shall render encouragement to persons to settle on these lands and engage in the cultivation upon them of tropical productions, the principal portion of all of them, fit for cultivation, would be densely settled in a few years; but without such encouragement they will not be for a quarter of a century to come. Those who would settle upon them for such object, are mostly such as would be unable to pay for the lands to the government. They would be generally poor men, supporting their families by their labor, whose chief motive for such settlements would be the desire

of establishing a permanent home. To induce the cultivation of tropical products, the land must be owned by the persons engaging in the cultivation of them. The rearing of an orange or lime grove, or an olive grove, and indeed the cultivation of most of the tropical productions, is a permanent improvement, taking several years to result in profit to those who undertake such cultivation. A slave force could not be employed profitably in such business. If the United States would bestow 160 acres of land upon every person who would permanently settle on any lands south of $26\frac{1}{2}$ degrees of latitude, reside upon such lands for five years, and actually cultivate at least 20 acres in tropical productions, under proper regulations to be prescribed by law, the benefit resulting to the United States would be vastly greater than the paltry pittance of \$200 exacted in the purchase of such quarter section from the settler. Again, these lands have yet to be surveyed and brought into market; and with the uncertainty in regard to the pre-emption laws, few will be found disposed to settle on them, and make any improvements, without some guarantee from government that such improvements will not be wrested from them hereafter by speculators. The importance of having a permanent steady white population attached to the soil in the section designated, must be admitted by every intelligent man who looks at the geographical position of that section. Without such population, in time of war, it would be the *point d'appui* of a foreign enemy; once in the possession of the enemy, it would afford great advantages to them in the annoyance of our coastwise commerce, and in making predatory incursions into the adjacent country. The importance of encouraging the cultivation of the kind of agricultural products referred to we cannot conceive any one will dispute. The United States pay to the West Indies, to South America, to the Azores, to Portugal and other tropical countries, a large amount annually for such products. South Florida is the only part of the United States in which these products can be raised. With the exception of the articles of coffee, tobacco, sugar, tea, and black pepper, it is believed, with proper encouragement, an amount equal the entire amount imported into the United States would be raised in the country included in the limits we have indicated in a few years.

Vessels trading to Florida would not be subject to the onerous exactions in foreign ports, and the close proximity of the peninsula to New Orleans would enable that market, and the entire valley of the Mississippi, to be supplied with greater facility, and at a less cost, than from Cuba or elsewhere; and the Atlantic ports could be furnished with equal facility and expense as from the West Indies. The existence of such a state of things will decrease our dependence on foreign countries—a new source of employment for our domestic industry will be created. That the government of the United States will afford such encouragement as has been intimated, if proper efforts are made to disseminate information on the subject, we do not doubt. The past liberal legislation of Congress on this subject is a guarantee that it will not neglect its duty, if its attention is properly directed to it. In 1832, the executive

of this territory directed the notice of the legislative council to it, in a message, an extract from which is appended hereto. At the same session of the council, an act was passed entitled "An act to incorporate the Tropical Plant Company of Florida," approved January 23, 1832, which is to be found on page 2 of the Laws of that year. The application made to Congress, by those who formed the company, was recommended by the legislative council; and in 1838 Congress passed an act, to be found in volume 9 Laws United States, page 869, entitled "An act to encourage the introduction and promote the cultivation of tropical plants in the United States." The committee deem it useful to copy that act entire in this report. It is in these words:

"Whereas, in obedience to the treasury circular of the sixth of September, 1827, Dr. Henry Perrine, late American consul at Campeachy, has distinguished himself by his persevering exertions to introduce tropical plants into the United States; and whereas he has demonstrated the existence of a tropical climate in southern Florida, and has shown the consequent certainty of the intermediate domestication of tropical plants in tropical Florida, and the great probability of their gradual acclimation throughout all our southern and southwestern States, especially of such profitable plants as propagate themselves on the poorest soils; and whereas, if the enterprise should be successful, it will render valuable our hitherto worthless soils, by covering them with a dense population of small cultivators and family manufacturers, and will thus promote the peace, prosperity, and permanency of the Union: therefore—

"[SEC. 1.] *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That a township of land is hereby granted to Dr. Henry Perrine and his associates, in the southern extremity of the peninsula of East Florida, to be located in one body of six miles square, upon any portion of the public lands below twenty-six degrees north latitude.

"SEC. 2. *And be it further enacted,* That the said tract of land shall be located within two years from this date by said Henry Perrine, and shall be surveyed under his direction by the surveyor of Florida: *Provided,* That it shall not embrace any land having sufficient quantities of naval timber to be reserved to the United States, nor any sites for maritime ports or cities.

"SEC. 3. *And be it further enacted,* That whenever any section of land in said tract shall be really occupied by a bona fide settler, actually engaged in the propagation or cultivation of valuable tropical plants, and upon proof thereof being made to the Commissioner of the General Land Office, a patent shall issue to the said Henry Perrine and his associates:

"SEC. 4. *And be it further enacted,* That every section of land in the tract aforesaid, which shall not be occupied by an actual settler positively engaged in the propagation or cultivation of useful tropical plants within eight years from the location of said tract,

or when the adjacent territory shall be surveyed and offered for sale, shall be forfeited to the United States.

"Approved July 7th, 1838."

All the encouragement that could be desired would be a general act containing similar provisions, with also those before suggested for the benefit of all settlers in the designated region. A gratuity of a quarter section to each one engaging in such cultivation would be sufficient. Provision should be made for the survey of the locations, without reference to the sectional lines now observed in the United States surveys. The benefits of the act of Congress above quoted have been lost to Florida by the death of Dr. Perrine, who was murdered at Indian Key, in 1840, by the Indians. Previous to his death, he had embarked his whole fortune in this undertaking. His family providentially escaped the massacre, but with the loss of their entire property, and applied to Congress not to enforce the forfeiture contained in the act, which had been incurred in consequence of Dr. Perrine's death. Florida, for whom Dr. Perrine made great sacrifices, whose patriotic efforts, had he lived, would have resulted so much to her benefit, seconded that application. Congress has extended the grant to his heirs, and it should give similar grants to others. The committee cannot close this report without adverting to a subject to which their attention has been attracted by reading the proviso of the second section of the act of Congress above quoted. The policy pursued in regard to the public lands in Florida, has been exceedingly unwise and short sighted. The Spanish government before the cession, and the British government when it owned the Floridas, encouraged the building of saw-mills, by giving large tracts of public lands adjacent to those who established them. The United States seize all timber cut on the public lands as forfeited. The most valuable lands for cultivation are kept from sale under the pretext of having "naval timber" on them—which, if the fact, is not a sufficient reason for such a course. Some half a dozen persons, at extravagant salaries, are employed to watch the timber and keep every body from stealing it, which they can easily do notwithstanding, when it is worth stealing. It would be much wiser to dispose of the lands, and have them occupied by industrious agriculturists, who can defend the country without the timber better than the timber can defend the country without them.

The committee have not deemed it expedient to make a dissertation upon the several different products specified in the schedule annexed, and the cultivation of which should be encouraged. They do not profess to be competent to write an agricultural essay. One of the resolutions reported for the consideration of the House, is to procure authentic data as to these different products. The article of arrow-root being specially mentioned in the resolution of inquiry addressed to the committee, they deem it proper to make a few observations respecting it. The facility of raising the compty, from which this article is manufactured in South Florida, should occasion the exclusion of all arrow-root from foreign countries. The arrow-root produced from the compty, is equally as nutritious

as the arrow-root of Jamaica or Bermuda. It can be made at a profit, if it brings 10 cents at the place of exportation. Within the last year, at least 25,000 pounds have been made in South Florida for shipment; millions of pounds could be annually made in South Florida, and more than enough for the demand on this continent; and, indeed, larger quantities could be sent to Europe;—all that is wanting is labor, *and land owned by the laborer*. The compty is indigenous to the whole peninsula. We do not ask for encouragement by a protective impost. Every part of the south should disdain any participation in the system of unconstitutional plunder by the means of protective tariffs. We should scorn such deception and iniquitous system of unequal taxation, by which, if persisted in, the Union will become a burden instead of a blessing. The encouragement and protection we seek is fair, open, and above-board. If this is not granted, we want no other. With these suggestions, the committee recommend the adoption of the following resolution.

WILLIAM W. LORING,

JAMES H. RANDOLPH,

H. H. PHILIPS,

F. E. DE LA RUA,

JNO. P. BALDWIN,

Committee on the state of the Territory.

Resolved, That the governor of Florida be requested to address the Secretary of State of the United States and solicit instructions to the different United States consuls in tropical countries, and to the officers of the navy visiting tropical countries, to procure such information relative to the practicability of raising in Florida different tropical exotics as may be sought by the governor of Florida, or the commissioners named in this resolution; and that such consuls and officers be requested to procure and transmit to Florida such seeds, roots, and plants, and products, as may be introduced and cultivated here, with such information as to their cultivation as may be useful; and that the governor of Florida be requested to make inquiries to procure such information; and that S. S. Sibley, esq., editor of the Floridian, and J. Clisby, esq., editor of the Sentinel, Tallahassee, be also requested to act as commissioners to collect, in like manner, authentic data on these subjects, and have the same published for the information of the public, and laid before the next legislature of Florida, so as to bring the subject advantageously before Congress.

Which was received, read, the resolution unanimously adopted, and, on motion of Mr. Hart, 500 copies of the report, resolution, and documents, ordered to be printed.

Schedule of products to be raised.

Compty, yam, casava, ginger, pulka, Sisal hemp, indigo, tobacco, cortex cascarilla, canilla alba, sarsaparilla, sugar cane, pepper, bush

and vine pepper, pimento, tea plant, orange, guava, Otaheite plum, shaddock, lime, hog plum, forbidden fruit, lemon, Jamaica apple, grape fruit, citron, sugar apple, banana, pineapple, cocoanut, plantain, sap-dilla, sour sop, Avocado pear, mango, mame, olive, mame sapota, boxwood, lignumvitæ, mahogany, titi, and ship timber.

Extract from acting governor Westcott's message, 1832.

"In May last, the governor received a communication from Commodore Elliott, commanding naval officer on the West India station, stating that Lieutenant Commandant Boerum, of the United States schooner Shark, had, on a visit to the island of Trinidad, procured from Sir Charles Smith, governor thereof, several varieties of the sugar cane; a box containing one of which, the Congo, was deposited with a gentleman in Pensacola, subject to the governor's order, with a view of promoting the objects of a resolution of the House of Representatives of the United States, January 25, 1830, respecting the procurement of 'such varieties of the sugar cane, and other cultivated vegetables, grains, seeds, and shrubs, as may be best adapted to the soil and climate of the United States;' which resolution had been transmitted to Commodore Elliot by the Secretary of the Navy. The governor adopted measures forthwith to have the cane disposed of in the most advantageous manner, to meet the objects of its importation. The resolution of Congress alluded to, was introduced by the delegate from this territory, and, if carried fully into execution, it is calculated ultimately to produce, and particularly with regard to us, highly important and beneficial results. Hundreds of the vegetable productions of tropical climates, of great value, and some in such common use as to be considered articles of necessity, and which we now import at high cost, could be easily cultivated in any part of our territory. Many too tropical to flourish in west or middle Florida, could be reared under the more genial climate of the southern part of the peninsula. The southern part of this continent, and South America, and China, abound in trees, plants, herbs, and roots, possessing the most valuable properties, the use of which has been confined to the places of their production, but which could as well be produced and enjoyed by our own citizens. I herewith transmit to the council, and respectfully invite their attention to, an extract of an official letter from H. Perrine, United States consul for Campeachy, to the Secretary of the Treasury, in relation to this subject, which has been published in the newspapers, and from which I have taken it. Other documents, worthy of attention, are also herewith sent to the council. It will be noticed that Mr. Perrine is desirous that an act of the council should be passed, incorporating himself and his associates into a company for the cultivation of tropical exotics, and he proposes to establish the plantation of the company on the southern part of the peninsula. This enterprise should not be classed with the inflated visionary projects of which Florida has

been so prolific, and the failure of which has created so much distrust of all novel undertakings. If those who embark in it should not find it a source of gain, and should, after trial, abandon it, the benefits resulting to the country from the introduction of the many valuable foreign products they will have brought among us must be of considerable importance, and should induce us to render every encouragement and aid in our power to promote the success of the undertaking; and, although Mr. Perrine has made no direct application, I earnestly recommend the granting of a charter as he wishes, and the bestowment upon the company of as many privileges as is compatible with the public interests. The national legislature, it is to be hoped, will afford aid to so laudable an enterprise, and one which, if successful, promises to be of national benefit, by a grant of land sufficient for their use, or otherwise. I esteem it, however, of paramount consequence that an interest should be excited among the agriculturists throughout the territory in relation to the introduction and adoption of foreign products. The tea plant, those trees and plants from which are procured the olive, ginger, pepper, cloves, cinnamon, pimento, nutmeg and cocoa, and many other articles of daily use in our families, could, it is believed, with care and attention, be successfully cultivated in most parts of our territory. But the practicability of every article mentioned being readily produced by those planters favorably located, as it regards climate, cannot be questioned. The production of these articles, if only sufficient for our own domestic consumption, would be of immense advantage to our citizens; and, if experience should prove that Florida might, in a few years, be looked to by our fellow-citizens of the States for such products, the benefits resulting to the territory would be incalculable. If, as has been conjectured by some, we shall, before many years, have more formidable competition in the raising of cotton from Mexico, South America, the East Indies, from Egypt, and from the extensive countries bordering on the Black sea, opened to the trade of Europe by the cannon of the allies at Navarino, it is wise for the cotton planter to prepare for the adoption of other articles for cultivation; and, in respect to those that require any considerable length of time to bring them to maturity, he should not delay. Whether the cultivation of the cane, and the manufacture of sugar, can be relied upon as a certain source of profit to the Florida planter, and especially if the present duties on imported sugar are reduced by Congress, is by many regarded as problematical; but, conceding these doubts to be unfounded, admitting the conjectures stated in regard to cotton to be idle speculations, and if the experiment fails immediately to yield the planter pecuniary profit, the arguments of convenience, of independence, and of patriotism, are still in favor of the adoption and culture of every useful exotic congenial to our soil and climate that we can procure. The general government have offered, by the resolution above mentioned, great facilities for their introduction; but, for the more effectual accomplishment of this object, I suggest that a small appropriation be placed at the disposal of the executive to meet the

expenses of transportation and other charges necessarily incident to the procurement of seeds, &c.; and that you authorize, by resolution, such as may be received to be distributed, for propagation, under his direction."

No. 24.

STATE OF FLORIDA.

HOUSE OF REPRESENTATIVES—*March 4, 1845.*

Mr. Ferguson, from the judiciary committee, made the following report:

The committee, to whom was referred the resolution instructing them to inquire into the expediency of providing by law for the protection of the fisheries on the coast of Florida from the intrusion of non-residents of the territory, without paying an equivalent therefor, to those to whom such privileges belong, beg leave to report:

That, at an early period of the cession of the Floridas to the United States, and the organization of the territorial government, the fisheries on the southern coast of the territory attracted the attention of many intelligent and patriotic citizens, as being a source of permanent and valuable revenue and advantage to our people. In memorials to Congress, by the legislative council, as early as 1822, and repeatedly since, in reports and resolutions of the territorial legislature in subsequent years, in public reports of officers of the general government, and in messages of the executive of Florida, at different times, has this subject been referred to as one of high importance. Extracts from some of the documents alluded to are appended to this report. The convention at St. Joseph, in 1839, which framed the constitution of the State of Florida, that was adopted by the people the same year, considered this subject, and the exclusive right of the people of Florida to these fisheries was maintained. As an evidence of the importance of these fisheries, the use of them was sought by Don Onis, in the negotiation of the treaty of cession, for Spanish subjects, and virtually conceded by a provision giving to Spanish vessels, for 12 years after the treaty, permission to trade to Florida on the same footing as American vessels, and prohibiting a like privilege, during that time, to vessels of other nations. Under this clause the Spaniards, till 1832, claimed the *right* to fish in their own vessels on our coast, and it was acquiesced in. Another evidence of the value of these fisheries to the people of Florida is to be found in the fact that, in 1831, the British government made a formal application to General Jackson, then the chief magistrate of this Union, for permission, by the national government, to the inhabitants of the British Bahamas to enjoy them. The matter was referred by the United States Secretary of State to the executive of Florida, who protested against such privilege being granted, in a letter addressed to the State De-

partment, dated October 7, 1831. Extracts from this correspondence are annexed hereto. In 1832, the then acting executive of this territory brought this subject distinctly before the territorial legislature in a message, of which an extract is also given, annexed hereto. The subject was referred to a committee of the council, who made a report, which this committee deem it advisable should be republished for the information of those interested. In 1832, a bill, carefully prepared and recommended by that report, was introduced into the council, and, had that bill passed as originally proposed, it would probably have been of great benefit; but it was so mutilated by various alterations, by those who obviously knew but little of the subject, that it was rendered entirely impracticable of being put in force, and utterly useless. It has, consequently, ever since remained a dead letter on our statute book. The law, as passed, is to be found on page 375 of the "*Compilation.*" The committee will not reiterate the various arguments advanced in the several documents above referred to, upon the different topics discussed in them. They will content themselves with referring to those documents, and with recommending the publication of the extracts given, for public information, and a brief recapitulation of the few principles and facts borrowed from them, and obtained from other authentic sources, and which, in the judgment of this committee, imperiously demand the careful deliberation, and decided action, of the legislature of Florida on this subject, as one of high moment to the rights and interests, and, it may be said, the security of the people of Florida.

And, *firstly*. They are prepared to maintain the position that these fisheries are local; that they belong *exclusively* to the local sovereignty—to the people of Florida—and are held in common right by the people of Florida. They do not belong to the State government as State *property*. The State could not *alienate* such natural right; it could only *regulate* their common use by and for the people of Florida. In doing this it has power, and it is its duty, to prevent the participation, of those not resident citizens of Florida, in this valuable privilege, and to prohibit them from enjoying the use and benefit of those fisheries without rendering an equivalent to the people of Florida therefor. The right of piscary in such local fisheries does not in anywise appertain to the federal government. The right attaches to the local sovereignty exclusively. The federal government possesses no power of legislation with respect to these fisheries after Florida becomes a State, except such as may be necessary to aid and assist the State government in the enforcement of its laws, to maintain its rights; such as is subordinate to the State legislation, and the federal government is bound by the constitution to render such aid and assistance.

Secondly. There are considerations relating to the peace, quietude, and security of Florida, her protection from wicked enemies, foreign and domestic, that imperiously demand of those who are her constitutional guardians to enact laws in relation to the use of these fisheries. Abolition incendiaries from foreign countries, from the British West Indies, and from Cuba, and the still more wicked

and dangerous abolition incendiaries and traitors of the New England States, in the reckless madness of their fanaticism, may become engaged in these fisheries for the very purpose of availing themselves of the facilities which, while hovering on our coasts with such pretext, they would be afforded of tampering with our slaves and stealing them from their owners. If allowed to use these fisheries, foreign enemies will be afforded opportunities of trading with those Indians which the United States army and its gallant officers, in a war already of nine years duration, and not yet ended, have not either by the most desperate fighting, or the most cunning diplomacy, been able to remove out of Florida, and which, we regret to say, from present indications, will probably infest the peninsula, despite the United States army, for years to come. The committee will not dilate on these topics. They deem these brief suggestions all sufficient.

Thirdly. That these fisheries are immensely valuable, and that they can be rendered, by judicious legislative enactments, an unfailing source of great revenue to Florida, we have no doubt. Nay, that the more extensive use of these fisheries themselves, can be promoted by proper regulation of them by law, is equally certain. Such regulation will enable the large profits derived from engaging in them to be more equally divided. Their value will become more generally known, and many excited to embark in them, by salutary regulations, securing equal privileges, who are now restrained from so doing. Upwards of 20 eastern vessels, from 30 to 60 tons burthen, with from 5 to 15 men each, are now employed in these fisheries. Several vessels owned by resident citizens of Florida, are also engaged in them. These vessels supply the market of Havana and Cuba generally with not only fresh fish and roes, but also dried and salted fish, to an immense amount. The annual amount paid in Cuba to these fishing vessels, it is believed, exceeds \$150,000. The retailing of fish fresh in the Havana market is a monopoly, sold for a large amount by the Spanish government there. Those who possess the monopoly receive, it is believed, thrice the amount they pay the fishing vessels. At present, but few dried or salt fish are taken from Florida to New Orleans for the western country market, or to the northern Atlantic cities, as the profits of the Cuba market are much greater, and because those now employed in these fisheries are not more than sufficient to supply that market. It is anticipated, if properly regulated, hundreds of thousands of dollars of such fish could be sold advantageously throughout the whole Union. It only requires such regulation, for public attention to be directed to the facts with regard to these fisheries, to insure such result. It is not anticipated to exact of our fellow citizens of the Union a heavy imposition for the use of this privilege, for domestic consumption. The natural interests of both will prevent such course. In barter for these necessities, we should receive their products and manufactures, and thus the comfort and convenience and interests of all would be promoted; nor is it contemplated to impose any tax on our own citizens for the use of these fisheries in home consumption.

The chief tax proposed to be imposed for the use of these fisheries, will be upon non-residents of Florida, who furnish the Cuba markets. This will induce many to settle amongst us, and add to our population—the true wealth and strength of a State. The regulations in Havana, with respect to our citizens on the subject of the fish monopoly, are peculiar, and could they dispense with our fishermen, they would doubtless be prohibitory. A little countervailing regulation for the benefit of Americans, may, till the Cubians cease to eat fish, be of salutary effect. It is believed 20 per cent. can be exacted for all fresh fish carried to Havana, without decreasing the profit of those employed in catching them, which tax would either have to be deducted by the monopolist from his profits, or paid by the Cuba consumer. There is no danger of our losing the market, or of its decreasing, as to demand. These fish are an article of necessity there, and they cannot be got anywhere else than Florida, if at all, without incurring greater loss than 20 per cent. The Cubians will pay this tax—they will be forced to pay it. They will be convinced it is their policy to do so. There are no arguments so irresistible as those proceeding from the stomach. No rebellion is so formidable as one growing out of such grievances. A people may dispense with ribbons and laces, calicoes and broad cloths, and other articles of luxury, and use coarser fabrics, but we think it must be received as a fact that no people can exist without food. For the use of these fisheries, the Cubians should pay an equivalent. No war need be declared by the federal government against Spain to enforce such payment. An *intestine* force in Cuba will enforce our laws, exacting the tax, without trouble to us. It is believed at 20 per cent., the proceeds of such annual tax into the treasury, after deducting all expense for collecting, would be at least \$30,000 annually.

The right and policy, and susceptibility of these fisheries being so regulated by law, the only remaining question is as to the *modus operandi*. What enactments shall be made; what details put into the law, to enforce such right, and establish this policy? This is the great difficulty. Upon this subject the committee deem it proper to suggest that, to the first legislature of the State should be deferred definite action on this important subject. The committee now deem it best to decline suggesting at present the details of such law, except as above hinted. The first legislature of the State should not act hastily, or without full advisement and deliberation, nor without all the information from certain and unequivocal data, that can be had. To obtain that information, this committee deem it advisable that the house should adopt the resolutions reported herewith. With this recommendation, the suggestion that it would be useful to publish all the information received by the executive from time to time on this subject, under him, they ask to be discharged from the further consideration of the subject.

I. FERGUSON, Jr., *Chairman.*

Resolved by the House of Representatives of Florida, That the governor of Florida be requested to address the Secretary of State

of the United States, and ask that copies of all communications on file in his department, from the Spanish or British governments, respecting the fisheries on the coast of Florida, and the replies of the American government to such communications, and copies of the correspondence with the territorial government and said department, in relation thereto, may be furnished the governor of Florida for publication, for the information of the people of Florida; and also that the governor solicit, from the Secretary of State, instructions to the United States consuls and agents in Cuba and other West India islands, to procure such information as the governor of Florida, or the commissioners named in the resolutions following, may request of them, in relation to these fisheries, and to communicate it to them, to be laid before the next legislature of Florida.

Resolved, further, That the governor of Florida be requested to address such persons as may probably render the information desired, and make inquiries as to the character, extent, value, and locality of the fisheries on the southern coast of Florida, and of the practicability of being made to yield a revenue to the State, and the proper details of a law regulating them, with such views, and the cheapest and most advisable mode of enforcing it; also the number of vessels employed in the fisheries; the number of the crew of each; the names of vessels and owners and masters, and where they hail from; the quantity and kind of fish annually caught; the fishing seasons; the value of the fish; where sold, and the price obtained for them; the estimated profits of the fishermen; the regulations under which they are sold; the effect of a tax being levied upon those who use these fisheries; how those fish that are cured are cured; whether, and if so, how the use of the fisheries can be extended; whether fish cannot be furnished from the Florida fisheries for the western and northern markets.

Resolved further, That Hon. W. Marvin, S. R. Mallory, esq., O. O'Hara, esq., P. J. Fontane, esq., L. W. Smith, esq., A. Patterson, esq., and Chas. Howe, esq., of Monroe county, the collector of customs of Key West, Wm. F. English, esq., of Dade county, and S. Peck, esq., of St. Lucie county, be, and they are requested to act as commissioners, to collect such information, and communicate to the governor of Florida, to be laid before the next legislature thereof.

Extract from the message of J. D. Westcott, acting governor of Florida, to the legislative council, in January, 1832.

There is no subject involved in the scope of our duties, that I deem of more importance to the interests of the territory than the regulation by law of the valuable fisheries, in the waters adjacent to the islands and keys, and in the bays and sounds, and on the coasts of our territory, and their protection from the intrusion of foreigners. In September last, the governor received a communi-

cation from the State Department, informing him that the British minister at Washington, at the instance of the governor of the Bahama islands, had made application to the general government in behalf of the inhabitants of those islands, for permission to "catch fish and turtle on the coasts of Florida;" and he requested him to furnish any information he might possess relating to the subject. The letter of Mr. Brent, acting secretary of state, and a copy of the answer of the governor, are herewith submitted to the council. Upon a perusal of this correspondence, it will be seen that the rights and interests of the people of Florida, in regard to these highly valuable natural privileges, are fully sustained in the reply of the governor; and it will, I am confident, occasion the favor asked for, to be withheld. These fisheries are, it is believed, wholly within the local jurisdiction of the territory, and subject to the control of and regulation of the legislature. Of the practicability of making them a source of considerable revenue to our local treasury I do not entertain a doubt. All that is wanting is a proper and judicious law, and faithful agents to execute it. I am precluded on this occasion, by the limits prescribed for this paper, from any discussion of the various important questions, arising in the consideration of this subject, but the letter of the governor to Mr. Livingston, which I have referred to the council, notices some of them, and entirely concur with him in the views and opinions he has there advanced. This subject was brought before the last council by the member from Washington and Walton, but the session being too far advanced, when it was introduced, to admit of its proper consideration, it was deferred. It is now again submitted to the wisdom of the council, with a hope that it will not be permitted to pass by without definite consideration. It is advisable that the express consent of Congress to such law as you may pass on this subject be obtained before it is put into force.

Extract from the report of the committee on the state of the territory, 1832.

"The committee on the state of the territory, to whom was referred so much of the acting governor's message as relates to the fisheries on the coast of Florida, respectfully report:

"That they accord with the acting governor in the opinions advanced in his message, as to the importance and value of these fisheries to the people of Florida; their susceptibility of being made a source of considerable revenue to our treasury, and of their being a proper subject for legislative action, with such view.

"The committee do not consider it necessary to make any prolix descantation on the various interesting and important questions of international and constitutional law, and of natural right, which grow out of this subject. The correspondence between the State Department and the governor of this territory, which has been referred to the council, is full and satisfactory on most of these ques-

tions, and the committee would respectfully suggest the expediency of its publication, that a full understanding of the subject may be had, as well by our fellow citizens of the States as also by the people of Florida. The committee have, however, thought proper to answer two or three objections to the measures they propose in relation to this subject, which have not been fully noticed in that correspondence.

"It has been urged that the laws of nations would not justify the appropriation of these fisheries to ourselves *exclusively*. The committee would remark that the British government have *admitted* our right to do so, by asking for the use of these fisheries *as a favor*. But we do not desire to avail ourselves of any advantage that may be derived from such concession; nor do we fear a reference to the laws of nations.

"Vattel, among other things on this subject, says: 'The various uses of the sea near its coast render it very susceptible of property. People there fish, and draw from thence shells, pearls, amber, &c. The nation to whom the coasts belong may appropriate to itself an advantage which it is considered as having taken possession of, and make a profit of it, in the same manner as it may possess the domain of the land it inhabits. If a nation has fishing on its coast that is particularly advantageous, and of which it may become master, shall it not be permitted to appropriate this natural advantage to itself as a dependence on the country it possesses, and if there are a sufficient number of fish to furnish the neighboring nations, of reserving to itself the great advantage it may receive from them by commerce?'

"A nation may appropriate things where the free and common use of them would be prejudicial or dangerous. This is a second reason why powers extend their dominion over the sea, along the coast as far as they are able to protect their right.

"The banks of the sea belong incontestibly to the nations that possess the country of which it is a part, and these are the number of public things.

"All we have said of the parts of the sea, near the coast, may be said more particularly, and with much greater reason of the roads, bays, and straits, as still more capable of being occupied, and of greater importance to the safety of the country."

Marten, also, in his treaties on the laws of nations, on this subject, says: "The sea surrounding the coast, as well as those parts of it which are land-locked, such as the roads, little bays, gulfs, &c., as those which are situated within cannon shot of the shore, (that is within the distance of three leagues) are so entirely the property, and subject to the dominion of the master of the coast, that he has the exclusive right to all the produce of it, whether ordinary or accidental, as far as relates to things unclaimed by any other lawful proprietor."

The waters and fisheries over which we seek to extend our laws are peculiarly embraced in the description given by these authors, as being properly appurtenant to the adjacent shores, and subject to the exclusive enjoyment and entire control of its sovereign.

The committee reiterate the statement made by the governor in the correspondence above alluded to, that these fisheries are wholly local in their character. In this respect, they are different from the mackerel, cod, and whale fisheries of the north. *Our* fisheries are not in the open sea, but near to, and under the coast, in shoal soundings, and within the straits, bays, and sounds, and amongst the islands of the southern part of Florida, and many of those engaged in these fisheries dry the fish caught on the shores of Florida.

The exclusive right of piscary in the inhabitants of the adjacent coast is a natural right, founded on the natural appurtenancy of the fisheries to that coast, and the necessity of its existence, for the safety and welfare of the nation. The use of local fisheries by foreigners, to use the words of Vattel, "might be prejudicial and dangerous." Contagious diseases might be thus introduced, the country would be more exposed to an enemy approaching by sea; and facilities for exciting domestic disturbances, by such enemy, would be afforded. Some writers have formerly contended that the right could not appertain, if the fisheries were inexhaustible, and that a necessity must exist for this exclusive appropriation. The doctrine is, however, long since exploded, and the right recognized, as founded upon the broad and arbitrary principle, that every nation has a right to such exclusive appropriation, for the extension of her commerce, and even for convenience merely.

But it has been contended, that (admitting the premises as to the laws of nations, which the committee contend for,) the territorial legislature is not the "sovereign" to whom the power of regulating these fisheries belongs.

The committee, however, are of opinion that this position is untenable. Congress, in the organization of our territorial government, expressly delegated the legislative power, over all "*rightful* subjects of legislation" in this territory, to the governor and council. The right of revision is only reserved to Congress by the organic laws, and, with regard to our local and municipal regulations, especially should the exercise of the powers of Congress be confined to this reservation. In the plenitude and omnipotence of the power of the general government over her territories, unrestrained by any constitutional provision, Congress can, without doubt, repeal these laws, and even establish a military government in Florida; but would such an act be consonant to justice, or right, or propriety? Equally unjust and improper would it be for Congress to interfere directly with these fisheries, a subject most emphatically of mere local and municipal legislation. But if Congress chose to exercise such power in defiance of reason and power, it could only be done for the exclusive benefit of the inhabitants of Florida. The power of legislation over these fisheries cannot attach to Congress in its character of a national legislature, but arises solely from the right of temporary control over us in our present situation. The property in these fisheries, it is considered by the committee, is exclusively in the people of Florida. The possession of such property, nor its regulation by the national gov-

ernment, is not recognized by the constitution. The right of piscary is in no wise connected with the right of navigation. The regulation of the latter right belongs (it is admitted) exclusively to Congress, and it does not conflict with the regulation of the former, as claimed for the local legislature.

If Florida were a State, her right to regulate these fisheries would be indisputable; and the committee believe that the rights and privileges of the people of Florida, in this regard, are in no way different from those enjoyed by the citizens of the States. By the treaty with Spain, by which the Floridas were ceded to the United States, the citizens of this ceded territory are admitted to the enjoyment of all the privileges, rights, and immunities of the citizens of the United States.

Entertaining these views, and believing that, properly regulated, those fisheries may be made a source of considerable revenue to the territory, the committee beg leave to offer a bill, to be entitled "An act for the protection of the fisheries on the coast of Florida, and to raise a revenue therefrom to this territory."

The committee have experienced no little difficulty with regard to the details of this bill. The subject is one difficult to legislate upon, and they are not satisfied that the provisions of the bill presented will fulfil the purposes intended. The law contains no restrictions upon our own citizens, but is only intended to prevent the encroachments of foreigners. The law will not be enforced until it has been sanctioned by Congress. It is suggested by the committee that the aid of the general government is necessary to the enforcement of this act. If the United States would employ a small vessel on this service for a year or two, all the necessary aid would be afforded; but if not disposed to do this, instructions to their various officers of the customs, to render all the aid in their power, would be beneficial. The necessity and propriety of rendering us this aid is more obvious, from the fact that the persons engaged in these fisheries trade with the Indians on our coast, and employ them as fishermen and seamen.

EXECUTIVE OFFICE,

Tallahassee, Florida, October 7, 1831.

SIR: The communication from the State Department, of the 25th of August last, relating to the fisheries on the coasts of Florida, and requesting information as to the propriety of withholding or granting the accommodation applied for by the British minister, in behalf of the inhabitants of the Bahamas to catch fish and turtle on the coasts of Florida, was received in due course of mail.

The terms of the application, as gathered from the communication from the department, would induce the impression that the privilege asked for was of minor importance, but such opinion would be erroneous.

It has been estimated that the fish and turtle taken in the fisheries

on the coasts and in the waters contiguous to the islands and keys of Florida, and sold in the Havana and other places in Cuba, exceed one hundred thousand dollars annually. There are besides many sold and consumed in the United States, and elsewhere. There are a number of vessels, generally smacks, from twenty to fifty tons burden, employed *solely* in that business, and several persons pursue it, and also the employment of salvors or wrecking in the same vessels. Some years ago these fisheries were referred to by a gentleman, (Col. Gadsden, vide report in Congress, December, 1825) very competent to judge in this respect, in a report made to the government of an exploration of the peninsula as a topographical engineer, as one of the most valuable resources of the country. More recently, other intelligent gentlemen, who have taken an interest in the subject, and have made investigations to arrive at the value of these fisheries, and the practicability of their regulation by law for such purpose, have advanced the opinion *that they can be made the source of considerable revenue to our local treasury*. At the last session of the territorial legislature, the judiciary committee of the council were instructed to inquire into the subject, with that object; but for want of time to pay that attention to the subject its importance demanded, it was deferred to the next session of the council in January, 1832. The law proposed by those who brought the subject forward, I am informed, required all persons taking fish, &c., with intent to carry them *out of the territory*, whether such persons were *foreigners* or not, and whether the fish were carried to *foreign* ports or not, to procure a permit for that purpose, and to pay an officer appointed by the territorial authorities a certain amount, imposed as an equivalent for such privilege, and regulated by the quantity of fish carried away. It created a forfeiture of vessel and cargo, and an infliction of personal penalties for its violation. It is expected that a similar law will be proposed at the approaching session in January next, and will probably be enacted, and application will also most probably be made to Congress for aid in its enforcement; as, otherwise, obstacles may arise, at first, to an effectual and complete execution of its provisions. If the general government should regard it as contrary to sound policy, as an unwarrantable assumption of power, as conflicting with the interests of the United States, or as interfering with its engagements to, or the spirit of courtesy proper to be observed towards the British government, as it is subject to the revision of *Congress*, it can, if advisable, be abrogated before its enforcement is attempted.

The fish and turtle are chiefly (if not all) taken in the sounds, bays, &c., on the coasts, and in the waters contiguous to and between the islands and keys, and in shoal waters, and, as is believed, will be admitted entirely *within the local jurisdiction*. It is contended by some of those of our citizens who have interested themselves in this subject, that the right of *piscary* in these waters is wholly *local*, and belongs *exclusively* and *solely* to the citizens of Florida. This exclusive claim is founded upon their inhabitancy of the country to which these fisheries naturally and geographically

appertain. They are not sufficiently beyond the *local* jurisdiction as to render them of the *national* character of the mackarel, cod, and whale fisheries, and to place them under the control and protection of the *national* government. It is also urged that if the general government have control over this right of piscary, it is owing to our situation at this time, (being only a territory,) and that when we become a State, this right and the entire regulation of these fisheries will revert to the State government, as appurtenant to the *local* or State sovereignty. There are also those who deny *any* authority in Congress, *even at this time*, to interfere with these fisheries, except in the *revision* (as prescribed in our "organic act") of our territorial laws.

It is not considered necessary or proper on this occasion to offer arguments to show whether all or any of these views of the rights of the general government, and of the people of Florida, are false or sound. They can be as properly and justly weighed without the very humble aid I could render. The most entire confidence is reposed that no measure compromising the rights or interests of our citizens beyond what it is their duty, as good citizens, cheerfully to acquiesce in; nor any course tending to fetter the State government, which it is trusted is soon to be organized in Florida, will be pursued by those now entrusted with the ministration of the national government.

It would seem that the British minister is under the impression that the inhabitants of the Bahamas enjoyed the accommodation asked for before the cession of the Floridas to the United States, and *until* the British West India islands were closed to the commerce of the United States; and that the accommodation was refused to be continued in consequence of this restriction upon our commerce. That no persons of any nation were prevented from fishing within the waters of Florida before the cession, and, also, from doing many other things since prohibited by our laws, is correct. The extension of the favor of fishing, as then enjoyed by strangers, did not conflict with the interests of the Spanish population of Florida. The number of Floridians then employed in the fisheries was, compared to the number now engaged, quite limited. In fact, as those employed in the business supplied St. Augustine, and Pensacola, and other *Spanish* towns, among which were, as at present, the Havana and Matanzas, inducements to *favor* them; rather than otherwise, existed with the Spanish authorities.

The *Spanish* population of Florida, for years previous to the cession, did not equal one-eighth of the present number of its inhabitants. It was confined chiefly to the cities of St. Augustine and Pensacola, and their vicinity. If they had been disposed not to permit, they had not the power to prevent the use of these fisheries by strangers.

Soon after the cession, and *before the West India ports were closed to the United States*, and as the population of Florida increased, especially down the peninsula, and on its coasts, and on the islands and keys, these fisheries were found to be highly valua-

ble, and, in some respects, necessary for the use of the inhabitants of the country, especially those near the sea coast.

The Seminole nation of Indians, who use many of these fish, were also, about this time, removed to the peninsula, and confined by treaty to it. The policy and laws of the United States, and of the territory, required that *no foreigners* should have those opportunities of association with them, which the use of those fisheries and the consequent frequenting of our coasts permitted.

Difficulties occurred between residents of the Bahamas, who visited our coasts in vessels under the pretext of fishing, but really to carry on the employment of salvors, and our citizens engaged in the same pursuit; and, in consequence of the improper conduct of the former in a variety of ways, and among others, in taking vessels across the gulf stream into Nassau, and other places, for the adjudication of salvage for services rendered on our coasts and in our waters and jurisdiction, the latter resolved to force *all foreigners* to forsake these fisheries, and also the wrecking business on our coasts. No violence was, it is believed, committed; but they coalesced and avoided all amicable association with the foreigners, refused to furnish provisions or aid them in any manner, threw every possible obstacle in their way, enforced vigorously the *revenue laws* of the United States, relating to foreign vessels in our waters, and also the laws regulating intercourse with the Indians, and adopted many other expedients extremely vexatious to those against whom they operated. After some time, in consequence of the conduct of the wreckers from the Bahamas, the act of the 3d of March, 1825, entitled "An act concerning wrecks on the coasts of Florida," was passed by Congress. No officer had authority or instruction from, nor was any person incited, aided, or countenanced by, either the national or territorial government, in driving the fishermen and wreckers of the Bahamas from our coasts, except such assistance as was afforded by the legal prosecutions in our courts authorized by the acts of Congress above noticed, and which acts, it should be observed, were mere *local, municipal* regulations, that all foreigners coming within our jurisdiction, and especially those using these privileges, were bound not to infringe. Indeed, the privilege *asked for* has never been denied the inhabitants of the Bahamas by our government, nor has any legislation been had with a view to such effect, either by Congress or the territorial legislature.

The measures of our fishermen and wreckers, and the enactment of the last mentioned act of Congress, and the alluring prospects for settlement in our territory, induced many, who wished to continue or embark in the business of fishing and wrecking, to become residents of Florida and citizens of the United States; and among them were several inhabitants of the Bahamas. All this was *anterior* to the closing of the West India ports to our commerce. But to prove that the obstacles thrown in the way of the Bahamians fishing on our coasts, by our fishermen and wreckers, was not induced by any feelings arising from that measure of the British government, it is only necessary to state, that the regulation closing the West India ports was highly advantageous to the citizens

of Florida. We had no trade that it could affect injuriously. Standing, in most respects, to the northern and western States, as do the British West India islands, purchasing the same products and disposing, in return, of the same articles, the closing of the ports by shutting up their markets, as to the United States, made our purchases more plentiful and cheaper, and, by decreasing the importations from those islands, enhanced the demand for and the prices of our products. Besides, much of the capital, and many persons who had been employed in the West India trade, but who, in consequence, were forced into other employments, were induced to emigrate to our territory, and to seek out and to put into action the latent resources of our new and then comparatively unknown country.

It is therefore repeated that the course pursued towards the inhabitants of the Bahamas, by individuals, and which in some measure operated to prevent their enjoyment of these fisheries, was not in anywise in retaliation for, or owing to, the closing of the West India ports; and that their own improper abuse of this privilege provoked such course. If, however, the measures pursued by our fishermen and wreckers, (without the encouragement and not at the instance of the government,) had not been effectual, it is probable that the ascertainment, upon the settlement and improvement of the country since, that these fisheries were valuable, and that the interests of the inhabitants required the exclusive use of them to be retained for them alone, would have induced measures by the territorial if not by the national government, with that object in view.

The considerations existing against granting the extension asked for previously, have not lost their force by the recent arrangement between the two governments, opening the West India ports to American commerce.

Although the limits assigned the Seminoles by the treaty do not extend to within *fifteen* miles of the sea, it *has been found necessary* to suffer them to visit the coast and obtain fish. The practice cannot be discontinued without exposing them to great suffering. Upon the extension of the favor asked for, it would be next to impossible to prevent association between them and the *foreign* fishermen, and such intercourse would inevitably lead to infractions of the laws of the United States in regard to trading with them—would be destructive of all government over the Indians, and might lead to the most dangerous consequences.

Checks and restraints and facilities for detection, apprehension and punishment exist with regard to our citizens who may violate the revenue laws of the United States, and other laws of the general and territorial governments, that could not be imposed upon non-resident foreigners approaching our coast in vessels. Indeed, such opportunities for smuggling, especially, would be afforded to foreigners, by the extension of this privilege, that it could not be prevented.

If the privilege was granted, it is feared also it would again be used as a pretext to enable interference and competition with our

citizens in the business of wrecking, and would lead to collisions and disputes and difficulties, and engender feelings calculated to disturb the harmony which between two nations, having the same origin, laws and language, should be preserved, as a matter not merely of reciprocal interest, but of mutual pride.

If the President, however, should conceive the national government possesses the power, and that either courtesy to the British government or the interests of our own, renders an express grant or extension of the privilege asked for proper or advisable, it is trusted that it will be granted only with conditions that will render those who use the fisheries amenable to such laws as may be enacted for the regulation of these fisheries, and liable for such equivalent as may be imposed upon them, equally with all others, for such liberty, *by our territorial legislature.*

I am, respectfully, your obedient servant,

WM. P. DUVAL.

Hon E. LIVINGSTON,
Secretary of State.

P. S. It is respectfully requested that information be given to the executive department of this territory of the course pursued in relation to this subject.

Which report was received and the resolutions adopted.

[Note by J. D. W., 1848.] The British minister at Washington has renewed this application more than once since this letter was written, but the United States have never attempted to give the Bahamians any privileges as to these fisheries. The British minister, last year, also remonstrated against the enforcement, by Judge Mallory, the collector of Key West, of the act of Congress of February, 1803, prohibiting vessels from bringing negroes into ports of States, the laws of which excluded such persons, and which act was enforced to keep out the Bahamian negro *emancipees* and apprentices, composing the crews of their small vessels, and to prevent them doing harm with the slaves.]

List of vessels wrecked on the Florida coast and Reef

Prepared by John C. Hoyt, agent

Month	Name	Captain	Where from	Where bound	Value of cargo
Jan.	Ship Bertrand	Blanch	New Orleans	New Orleans	2,000 00
Feb.	Ship Hattie	Blanch	New Orleans	New Orleans	2,000 00
Mar.	Ship Hattie	Blanch	New Orleans	New Orleans	2,000 00
Apr.	Ship Hattie	Blanch	New Orleans	New Orleans	2,000 00
May	Ship Hattie	Blanch	New Orleans	New Orleans	2,000 00
June	Ship Hattie	Blanch	New Orleans	New Orleans	2,000 00
July	Ship Hattie	Blanch	New Orleans	New Orleans	2,000 00
Aug.	Ship Hattie	Blanch	New Orleans	New Orleans	2,000 00
Sept.	Ship Hattie	Blanch	New Orleans	New Orleans	2,000 00
Oct.	Ship Hattie	Blanch	New Orleans	New Orleans	2,000 00
Nov.	Ship Hattie	Blanch	New Orleans	New Orleans	2,000 00
Dec.	Ship Hattie	Blanch	New Orleans	New Orleans	2,000 00

STATEMENT

VESSELS IN DISTRESS AT KEY WEST,

FROM

JANUARY 31 TO DECEMBER 31, 1846.

List of vessels wrecked on the Florida coast and Reef,

Prepared by JOHN C. HOYT, agent

Month.	Name.	Captain.	Where from.	Where bound.	Amount awarded by court.
1844.					
Jan....	Ship Bertrand.....	Blanchard.	Portland.....	New Orleans..	.....
Feb....	Brit. barque F. Matthew Hill	Hill	St. Andrews...	Matanzas.....	.....
Mar....	Schr. Charlotte	Best.....	New Orleans..	Charleston .....	.....
	Brit. barq. Jas. Dennison Young	Young	Liverpool	Mobile.....	.....
	Brig J. D. Noyes	Parker.....	St. Mark's....	New York.....	.....
	Brig Mary Averill	Rivens.....	Jamaica .....	.....do.....	.....
	Brit. ship Rosa	Jeffries....	Mansonilla	Liverpool .....	.....
	Brig Angola.....	Bell.....	.....do.....	New York.....	.....
April....	Brit. ship Wellington...	McIntyre..	New Orleans..	Liverpool .....	.....
	Brig Gulielma.....	Mayo.....	Cuba.....	New York.....	.....
May....	Sloop Rival	Smith	New Orleans..	Nassau .....	.....
June....	Brig Cashier	Pike.....	Cuba	New York.....	.....
	Brit. ship Challenge..	Long	Jamaica	London .....	.....
July	Brig Alwida	Tallman...	Honduras	New York.....	.....
	Fr. ship Louis XIV	Juge.....	New Orleans..	Havre .....	.....
Aug....	Schr. Select.....	Lewis .....	.....do.....	Barbadoes. ....	.....
	Brit. ship Rothschild...	Fell	Apalachicola...	Liverpool .....	.....
Oct....	Ship Atlantic.....	Mallett...	Liverpool	New Orleans..	\$4,325 00
Nov....	Barque Highlander.....	Maybury..	Providence....	.....do.....	2,099 00
	Barque Aitalia.....	Hammond.	Havana.....	Baltimore.....	2,021 00
	Ship New York.....	Harding...	Matanzas	Cowes.....	.....
	Brig Algonquin.....	Williams..	Philadelphia...	Mobile.....	.....
	Ship Washington.....	Benson....	Norfolk	New Orleans..	2,800 00
	Brig Statira.....	Babbidge..	St. Mark's....	New York.....	1,240 50
	Schr. Ranger.....	Herryllue..	Galveston	Baltimore.....	.....
	Brig Lime Rock.....	Ould	Key West.....	New Orleans..	.....
	Barque Eleanor.....	Slammer..	New Orleans..	Baltimore.....	.....
	Brit. brig Conservative.	Carrey....	Galveston	Liverpool	6,279 00
Dec....	Ship Zotoff.....	Murphy....	New Orleans..	Boston.....	6,320 93
					25,085 43

No. 25.

brought into Key West, from January 1, 1844, to January 1, 1845.

of the New York underwriters.

Amount awarded by arbitration.	Whole amount of expenses and duty.	Value of vessels and cargoes.	Remarks.
\$1,000 00	\$1,137 94	\$26,000 00	Dry rocks; no injury.
1,068 39	1,987 93	8,000 00	Brought in, condemned, and sold, (Carysfort.)
2,556 36	2,977 60	7,000 00	Tortugas; brought in and repaired.
600 00	1,045 24	5,000 00	Totally lost on Cape Antonio.
.....	1,016 98	16,000 00	Arrived leaking, and repaired.
3,037 00	6,141 24	15,000 00	Carysfort; repaired.
2,000 00	2,749 77	30,000 00	Quicksands; got off without damage.
.....	1,765 70	10,000 00	Arrived with loss of sails, spars, &c.; repaired.
15,717 00	19,863 08	56,000 00	Tortugas; lost.
.....	1,163 66	12,000 00	Arrived leaking, and repaired.
.....	223 61	1,000 00	do do
2,293 34	3,896 34	25,000 00	Carysfort; repaired.
2,033 33	3,289 05	18,000 00	do do
2,501 37	2,127 93	9,000 00	Carysfort; lost.
17,459 98	27,809 93	104,000 00	Long Key; lost.
1,050 08	1,318 35	4,000 00	Lost; Tortugas.
17,000 00	24,573 95	70,000 00	Key Vacas; brought in, condemned, sold, and repaired.
.....	9,104 59	35,000 00	Tortugas, do do do
.....	3,328 69	11,000 00	Carysfort; lost.
.....	3,432 12	12,000 00	Arrived in distress, and repaired.
.....	13,036 48	65,000 00	Arrived in distress, Oct. gale; condemned, sold, and repaired.
.....	1,488 08	47,000 00	American shoals; no injury.
.....	3,349 69	25,000 00	Wrecked in Key West harbor in Oct. gale.
.....	1,637 55	10,000 00	Condemned, sold, and repaired.
.....	.....	4,000 00	Sprung aleak at sea; run ashore at Tortugas.
250 00	425 00	8,000 00	Came in leaknig; condemned, sold, and repaired.
.....	3,294 44	33,000 00	Key Largo; lost.
.....	18,711 59	32,000 00	Tortugas; lost.
.....	8,108 95	27,000 00	The duties paid upon articles subject to duty, included in expenses.
67,626 76	169,064 99	725,000 00	

List of vessels stranded on the Florida Reef, and arrived at Key

Date.	Names of vessels.	Names masters.	Where belong- ing.	Where from.	Where bound.
1845. Jan.....	Barque Osprey.....	Collins....	Middleton....	New Orleans..	Philadelphia...
	Ship Mississippi.....	Hilliard ..	New York.....	.....do.....	Liverpool.....
Feb.....	Ship Venice.....	Salter.....	Portsmouth...	Boston.....	New Orleans..
	Barque Croton.....	Toune	Kennebunk ...	.....do.....	.....do.....
	Brig Hayne.....	Trescott..	Charleston ...	Charleston ...	Havana
March...	Brig Republic.....	Gates	New York.....	New Orleans..	New York.....
April ...	Brig Oneco.....	Smith	Thomaston....	.....do.....	.....do.....
	Barque T. D.....	Bassett....	Boston .....	.....do.....	.....do.....
	French brig	Hounce....	France.....	.....do.....	Martinique ...
	Schr. J. T. Bertine...	Brown....	New York.....	St. Mark's....	New York.....
May.....	Schr. Henry Clay...	Clough....	Portland.....	Mobile.....	.....do.....
	Brit. ship Yorkshire.	Bucke	Bristol.....	New Orleans..	Liverpool.....
	Ship Reznie	Clark.....	New York.....	New York.....	New Orleans..
	Barque Globe.....	Brugin....	Portland .....	.....do.....	.....do.....
June....	Brig Newark.....	Mervin....	New York.....	Mobile.....	New York.....
	Brit. schr. Atalanta.	Allison....	New Castle ...	Cuba.....	Cowes
	Brit. barque Tevenia.	Davis.....	London.....	Jamaica.....	Liverpool
Sept.....	Schr. Charlotte	Lewis	New York.....	Honduras ...	New York.....
Nov.....	Barque Mary.....	Marston ..	Baltimore ...	New Orleans..	Baltimore....
	Brit. brig Victor.....	.....	England	Jamaica.....	Norfolk
	Schr. B. D'Mar.....	.....	Sedwik.....	New York.....	Texas
	Ship Telumah.....	Borland ..	New Castle ...	Liverpool.....	Havana
	Brig Georgiana.....	M'Lellan..	Thomaston....	Thomaston....	New Orleans..
Dec.....	Barque Musay.....	Tucker ...	New York.....	New Orleans..	Trieste.....
	Schr. Bohemian.....	Nason	Kennebunk ...	Bremen	New Orleans..
	Schr. Staunch.....	Spillings..	New York.....	.....	.....

West in distress, from January, 1845, to January, 1846.

Value of vessel and cargo.	Amount of salvage decreed by court.	Total amount of expenses, including salvage, commissions, and other expenses.	Remarks.
\$10,000 00	\$2,076 84	\$3,134 73	Touched on quicksands; brought in and condemned.
80,000 00	1,000 00	1,000 00	Struck on quicksands; not much damaged.
35,000 00	.....	100 00	Among the rocks, and piloted out.
10,000 00	1,000 00	87 50	Sambro's Key; off without assistance.
12,000 00	.....	1,514 00	Soldier Key; not much damaged.
30,000 00	.....	1,112 15	Put in leaking.
38,000 00	8,346 45	11,423 79	North Tortugas; temporary repairs.
40,000 00	1,200 00	1,200 00	Sambro's Key; off without much damage.
25,000 00	.....	200 00	Put in for provisions, &c.
9,500 00	.....	25 00	Tortugas; little damage.
3,000 00	.....	750 00	Put in leaking.
90,000 00	4,000 00	5,500 00	Marquesas Key; no damage.
85,000 00	20,962 10	26,500 00	Carysfort Reef; lost.
4,000 00	537 91	1,400 00	Tortugas; brought in, condemned, sold, and repaired.
25,000 00	4,604 04	5,965 76	Pickle's Reef; lost.
22,000 00	3,282 08	5,382 22	Carysfort Reef; condemned and repaired.
40,000 00	3,200 91	5,527 34	do lost.
4,500 00	.....	1,837 00	Put in leaking.
27,000 00	.....	821 93	do
5,000 00	.....	.....	Tortugas; got off; no assistance.
9,000 00	200 00	200 00	do no damage.
45,000 00	11,931 66	17,904 91	Caryfort Reef; lost.
8,000 00	250 00	420 00	Sombrero Reef; no damage.
55,000 00	7,000 00	13,195 39	do brought in and repaired.
20,000 00	.....	.....	Put in in distress.
5,000 00	.....	500 00	do
737,000 00	69,591 99	105,709 51	Duties paid by wrecked vessels, \$25,104.

NOTE.—The foregoing statements are taken from a printed pamphlet addressed to Senator ASHLEY, chairman Judiciary Committee U. S., March 21, 1846, by Messrs. WESTCOTT and YULEE, in relation to the organization of the United States courts in Florida.

Statement of vessels in distress at Key West, from January 1 to by Mr. Yulee, referred to the Committee on the Judiciary, and 29th Congress, volume 3.]

Date.	Vessel.	From—	For—	Cargo.
January...	Samuel Young	Jacksonville.....	Texas	Lumber.....
	New Orleans	Tabasco.....	New York.....	Logwood.....
	Angora	do.....	do.....	do.....
February..	Abby Amilia.....	New York.....	Attakapas.....	do.....
March.....	Moxy.....	New Orleans	New Haven.....	Staves.....
	Southport.....	Charleston	Appalachicola....	Rice and hay...
	Cleopatra's Barge..	Tampa.....	Key West	do.....
April.....	York.....	New Orleans	Liverpool	Cotton, &c.....
	Ganges	Havana	Genoa	Sugar
	Frances	Jamaica	New York.....	Pimento
	John Parker	Matanzas.....	Hamburg.....	Sugar
	Mandarin	Jamaica.....	Liverpool.....	do.....
May.....	Russel Glover.....	Boston	New Orleans	Ice.....
	Tuscan	New Orleans.....	Providence.....	Provisions
	Mersey	Cardenas	Baltimore.....	Molasses
	Victoria.....	Nassau.....	New Orleans	Salt.....
June.....	Nelson	Jamaica.....	London	Coffee.....
	Russell.....	New Orleans	Gibraltar	Tobacco
July.....	Ch. D. Ellis	Philadelphia.....	Brazos.....	Coal.....
	Seaman	do.....	New Orleans	do.....
October...	St. Mark	Mobile	Liverpool	Cotton.....
	Colorado	Boston.....	Cedar Keys.....	General cargo..
	Metamora	New York.....	St. Mark's.....	do.....
	General Wilson	do.....	do.....	do.....
	Napoleon.....	Havana.....	Cardenas.....	do.....
	Exchange	Portland	Havana.....	do.....
	Commissary.....	Havana.....	do.....	do.....
	Eliza	Portland	do.....	Lumber.....
	Linedora.....	Havana.....	do.....	do.....
	U. S. Perry	do.....	Charleston.....	do.....
	Frances Watts.....	do.....	Cork.....	Sugar, &c.....
	Iris	New Orleans.....	do.....	Provisions.....
	Warsaw	Mobile	France.....	Spars.....
	Eben Preble.....	Liverpool.....	New York.....	Salt.....
	La Reunion.....	New Orleans.....	Marseilles.....	Tobacco
	Olive & Eliza.....	do.....	Cadiz.....	Staves.....
	Platina	do.....	France.....	do.....
	Com. Kearny	New York.....	Cedar Keys.....	General cargo..
	Gor. Bennett	Baltimore.....	Mobile	do.....
	W. W. Safford.....	New York.....	Brazos.....	Provisions
	C. H. Bacon	do.....	do.....	do.....
	Alida	Bristol	New Orleans.....	General cargo..
	Louisa	do.....	do.....	do.....
	Lafayette.....	do.....	do.....	do.....

December 31, 1846. February 3, 1847.—Submitted to the Senate ordered to be printed. [Senate Documents, No. 110, 2d session

Where owned.	General remarks.	Salvage.	Value.	Expense.
Bangor.....	Was ashore on the Florida reef.....	\$50	\$7,000	\$100
New York.....	Distress.....	60	10,000	60
Ellsworth.....	Distress; for repairs of rudder, &c.....	.....	9,500	1,500
Bath.....	Was ashore; relieved by wreckers, and repaired.....	500	4,000	1,434
Thomaston.....	Ashore at Tortugas; assisted by wreckers, and repaired.....	523	2,000	1,110
New York.....	Ashore at Tortugas; assisted by wreckers, and repaired.....	3,500	30,000	4,000
Maine.....	In distress; want of sails, &c.....	.....	800	300
Glasgow.....	Ashore on Carysfort reef; paid salvage to wreckers.....	13,500	95,000	15,400
New York.....	Put in, leaking.....	.....	15,000	3,650
Br. N. America..	Ashore on Alligator reef.....	1,700	12,000	2,336
Boston.....	Total loss; property saved, damaged.....	.....	105,000	11,659
Glasgow.....	Total loss; cargo damaged; saved by wreckers.....	1,650	60,000	3,000
Boston.....	On the reef; took wreckers; was brought in; damaged.....	3,750	25,000	9,000
Ellsworth.....	.....do.....do.....do.....	2,500	15,000	3,094
New Bedford.....	.....do.....do.....do.....	600	5,000	1,890
Bahamas..	Distress; sold, and broken up.....	.....	600	600
London.....	Ashore; took aid of wreckers.....	6,699	20,000	10,400
St. nington.....	Ashore; took aid of wreckers; was brought in; damaged.....	6,733	30,000	7,933
Pennsylvania.....	.....do.....do.....do.....	950	15,000	1,000
.....do.....	.....do.....do.....do.....	900	12,000	1,120
New York.....	.....do.....do.....do.....	21,020	80,000	26,803
Boston.....	Dismasted and refitted.....	.....	50,000	4,000
New York.....	Ashore near Key West; will be gotten off.....	.....	92,000	5,000
.....do.....	Ashore near Key West; refitted.....	.....	49,000	3,000
.....do.....	Ashore near Key West; condemned and sold.....	250	6,000	400
Portland.....	Ashore near Key West; sold as she lay on the reef.....	100	16,000	150
Havana.....	Ashore near Key West; sold as she lay on the reef.....	40	10,000	100
Portland.....	Ashore near Key West; refitting.....	.....	15,000	3,000
Spain.....	Ashore on Carysfort reef; wreckers assisted; vessel lost.....	2,020	80,000	4,800
United States....	Ashore on Carysfort reef; wreckers assisted; temporary repairs.....	5,500	75,000	6,500
Kennebeck.....	Ashore; refitting; wreckers assisted.....	500	3,500	60,000
Bath.....	Ashore on the reef; wreckers assisted; vessel lost; cargo saved.....	1,950	45,000	2,200
Charleston.....	Ashore on the reef; wreckers assisted; condemned and sold.....	380	500	28,000
Boston.....	Ashore; will be broken up.....	450	22,000	1,400
France.....	Ashore, and ship and cargo nearly total loss.....	1,500	5,000	2,100
Portsmouth.....	Ashore; ship and cargo condemned and sold.....	50	25,000	100
Bath.....	Ashore; ship and cargo condemned and sold.....	500	22,500	700
New York.....	Ashore; came off, and sailed without repairs.....	.....	34,000	4,000
.....do.....	Distress; dismasted; sold, and refitted....	450	11,000	700
Philadelphia.....	.....do.....do.....do.....	.....	23,000	2,800
New York.....	.....do.....do.....do.....	.....	10,000	2,000
Bristol.....	Ashore, but got off without damage.....	.....	5,000	134
Key West.....	Sunk in harbor, but refitting.....	.....	2,000	500
.....do.....	.....do.....do.....do.....	.....	2,000	500

STATEMENT—

Date.	Vessel.	From—	For—	Cargo.
October...	Water Lily.....			
1000	Saranah.....			
80	Warrior.....			
1 300	St. Dennis.....	Newport.....	Mobile.....	Assorted cargo..
1 44	Emma Eysenbury..	Nassau.....	Nassau.....	
1 110	Sarah Churchman..	Philadelphia.....	New Orleans..	Stores.....
	Cutter Morris.....		United States..	
	Villaneuva.....	Cuba.....	Havana.....	
	Navigator.....	St. Mark's.....	New York.....	Cotton.....
2 000	Ship Anne Hood...	Philadelphia.....	New Orleans..	Assorted.....
300				
	New England.....	Boston.....	do.....	Boston.....
15 400				
2 350				
2 338				
11 000				
2 000				

Of the above vessels, 11 were owned in Maine; 1 in New Hampshire; 2 in Rhode Island; 6 in Massachusetts; 1 in Connecticut; 11 in New York; 5 in Pennsylvania; 1 in South Carolina; 5 in Florida; 6 in England; 1 in France; 3 in Spain.

Continued.

Where owned.	General remarks.	Salvage.	Value.	Expense.
Key West	Sunk in harbor, but refitting		\$1,000	\$250
do.....	do.....do.....		2,000	800
do.....	Rode out the hurricane of October 11.....		2,500	600
Rhode Island....	Dismasted; sold, and refitted.....		2,000	1,000
Nassau.....	Dismasted, and refitted.....		5,500	400
Philadelphia.....	do.....do.....		18,000	
United States....	Ashore at Key West; condemned and sold.....		10,000	
Spain.....	Ashore; vessel and cargo total loss.....		20,000	
New York.....	do.....do.....do.....	\$722	20,000	900
Philadelphia.....	Ashore; got off by wreckers; salvage probably \$20,000; yet to be decided....	20,000	150,000	30,000
Boston.....	Ashore; got off by wreckers; salvage probably \$10,000; yet to be decided....	10,000	75,000	15,000
	Nearly every wrecking vessel on the reef lost or injured, with others; probable loss by them, and value.....		28,000	10,000
		108,992	1,624,800	213,423

Total amount of salvage paid at Key West during 1846, arbitrated and decreed, \$108,992.

Total amount of all expenditures by commerce brought into port in distress, including salvage, \$213,423.

Total value of property employed in commerce brought in in distress in 1846, \$1,624,800.

[NOTE BY J. D. W. IN 1848.]—It is not a little surprising, that, in the *twenty-seven years* Florida has been held by the United States, no complete nautical survey has been made of the "*Florida reef*." During such time, the *British* government has had ships-of-war, (among them the brig *Bustard*.) with scientific officers, engaged for months in such surveys; and even in surveying the harbor of Key West, and other of our harbors there! The charts used by our navigators are the old Spanish charts, and those made by the British from 1763 to 1784, and of the *recent* British surveys alluded to, and compilations of them by *BLUNT* and others—all imperfect in many particulars, and erroneous in others. *We have no original American chart of all the reefs and keys!* That accomplished and scientific officer, at the head of the "*Coast survey*," Professor *BACHE*, has informed me, that, if the means were appropriated by Congress, the entire reef and all the keys, from the Tortugas up to Cape Sable, could be surveyed in *one season*. The expense, to enable the work to be finished in *one season*, might not fall short of \$100,000; as, to effect it, three or four different parties of officers must be employed. But the benefits of such work would greatly outweigh this amount, and it will not cost less, to devote two or three years to it.

Extracts from the reports to the Navy Department by the officers of the navy in the Florida expedition in 1841 and 1842, taken from the files of said department.

FLORIDA EXPEDITION,

U. S. Sch'r Flirt, at Key Biscayno, January 24, 1841.

SIR: With the entire disposable force of this expedition, consisting of ninety seamen from the barges Otsego, Wave, and this vessel, and sixty marines, I started on the night of the 31st December to penetrate the Ever Glades, in co-operation with Colonel Harney, of dragoons, with one hundred troops. The leading object of the expedition was to surprise the town of Arpiarka or Sam Jones. Our movement being by night was necessarily slow, the nature of the country through which we passed interposing obstacles almost insurmountable. At midnight of the 2d instant, we reached the camp of Chitto Tustenuggee, upon an island on the borders of the Ever Glades, situate midway between Little and New rivers. This camp was the advance of Arpiarka's towns, and had been abandoned apparently ten days or a fortnight. On the 3d instant, the detachment from the Otsego was sent, in company with six artillery boats, to examine a neighboring island bearing east, distant four miles, and returned that night, having found the recent signs of two people. We remained at Chitto's camp until noon of the 4th, when we moved upon Arpiarka's camp. This was found to have been abandoned at about the same period as Chitto's. The principal town was situate upon the largest of a group of seven islands due west, and distant two miles from Pine island, around which the waters of the Ever Glades pass immediately into New river. Each island of the group had been inhabited and planted, and from the extent of the clearings and number of wigwams left, their population could not have been less than six hundred. The pumpkin and Lima bean were the chief culture of these islands, indeed of all those we visited in the Ever Glades. Early on the 4th we started for Pine island, where, having discovered no indications of a more recent presence of the Indians, the expedition returned to Arpiarka's camp, when it was determined to start early on the morning of the 6th, to cross the Ever Glades to the west coast, with the hope of finding the Spanish Indians there embodied at Onasa's, or the Fortune Teller's island. This was accordingly done, and whilst examining a small island on our route, upon which the Indians were in the habit of hiding their comty, a boat with two persons in it was discovered and as immediately disappeared. Pursuit was ordered by all the boats, in hopes of intercepting it at some one of the thousand channels through which it might escape. After a fruitless hunt the boats were recalled, when, at the request of Colonel Harney, I started with eleven boats that had returned, consisting of two from this vessel, six marine boats, and three from the artillery, to pursue in the direction of a neighboring island,

with the hope of finding them upon it. In this we were disappointed, but met four boats retreating from it, which were taken, but not until three of the men in them had been killed and the fourth wounded; the rest of the people then abandoned them and secreted themselves in the grass. A private of artillery was slightly wounded in this skirmish. Whilst hunting those who lay concealed in the tall saw grass, a fifth boat was discovered, but so far in advance that it effected its escape, it being impossible to overtake it and secure those already around us. In the meantime, Colonel Harney came up with the remaining boats; and although the entire force of two hundred and fifty men was thrown out to hunt these seven people, two of them were not found until the next day—when they were taken by a detachment under Lieutenants Sloan, of marines, and Ord, of artillery—but not until the man had fired twice, wounding Private Smith of marines, and Sergeant Sayers of artillery, the latter mortally. This Indian, Chichi by name, was known to be a celebrated guide throughout the territory, and orders had been given to take him alive. Upon his assurance that Arpiarka was to be found on the edge of the cypress north of New river, with one hundred men prepared and determined to fight, if invaded there, the expedition retraced its steps to hunt him out, and encamped at Arpiarka's town on the night of the 8th. In the afternoon of the 9th, we were again in motion, and at midnight reached Fort Lauderdale in New river, where were deposited the wounded and the prisoners, and two days' rest given to the force from its unceasing labors at the oars.

On the night of the 11th the expedition moved again, and at daylight on the 12th had reached the point where it was supposed Arpiarka was posted. After a fruitless hunt along the cypress for 10 or 12 miles, satisfied that he was not there, but had fled to his last retreat near Lake Okechobee, Colonel Harney determined to return to this post; and, having furnished me with his guides, I resumed with my force the course across the Ever Glades, and reached that night Arpiarka's camp.

* * * * *

Before day on the 13th, we moved for the town of Onasa, the fortune teller, and, having passed two small islands, encamped at night at Council island, whereon the Indians from all sides of the Ever Glades assemble for consultation. It bears from Arpiarka's camp west southwest, distant ten miles. There were no recent indications of Indians having been here. On the 14th, at noon, having passed seven small islands, we got an observation for latitude in 26° north, at an abandoned field of the Seminole Indians, and reached that night Alligator island, bearing from Council island west by south, distant twenty miles, having passed two small keys, the most westerly of which is the beacon for crossing the Glades, having upon it a solitary cabbage tree which is seen for ten miles around over the fields of grass. Here Lieutenant Commandant Rogers, of the Wave, commanding the advance with his boats, discovered a canoe which he speedily captured, having

killed the Indian who guided it, he refusing to surrender. This proved to be the boat that had escaped on the 6th instant, and contained, beside the man, a woman and two children. On the 15th, early after noon, we reached Onasa's camp in latitude observed $26^{\circ} 3'$, distant ten miles from Alligator's island, having passed on our route seven small islands. This we found deserted, as had been all the others for some weeks, nor did we afterwards discover any signs of the Indians in the Ever Glades. On the 16th, our course was about southeast by south, distant nineteen miles; on the 17th, south half west, twenty miles, through clusters of small islands, which we examined and found to have been cultivated at one time by the Indians, but now universally abandoned. The towns of Chikika's people were visited, and were found only tenanted by the skeletons of those upon whom justice had been executed by Colonel Harney. On the 18th, steering south southwest, we entered Harney's river, distant from the last encampment ten miles, and encamped for the night on its banks, about twelve miles from its source. The next morning, the 19th, descended this beautiful river about twelve miles, and reached the ocean on the western coast of Florida, in latitude $25^{\circ} 19'$ north. This river empties into the sea five miles south of Key McLaughlin, and is navigable for small class steamboats nearly to its source.

Rodgers's river also enters the Ever Glades at the south end of Key McLaughlin, but is not so broad or deep as this.

Respectfully, sir, &c.,

JOHN T. McLAUGHLIN,

Lieutenant, commanding expedition.

Hon. J. K. PAULDING,

Secretary of the Navy.

P. S.—A chart of our route is in course of preparation, and will be transmitted to the department so soon as completed.

J. T. McL.

[Endorsement on the foregoing.]

Does Colonel Harney make any mention of the co-operation of the naval force?

J. K. P.

FLORIDA EXPEDITION,

Flirt, at Key West, March 14, 1841.

SIR:

Lieutenant Commandant Rodgers, with all of the disposable force of the expedition has embarked in canoes to cross the Ever Glades from Harney's river to the River Marcos, fifteen miles south of the Caloosa-hatchie. He will visit, on his route, the Indian settlements on the western side of the Ever Glades, never heretofore

known to the whites. Chici and his wife, prisoners from the last expedition, accompany him as guides.

Respectfully, sir, &c., &c.,

JOHN T. McLAUGHLIN,
Lieut., Comdg. expedition.

Hon. J. K. PAULDING,

Secretary of the Navy, Washington city.

WASHINGTON, June 26, 1841.

SIR: I have the honor to enclose you a chart of the southern extremity of Florida, extending north to the Caloosa-hatchie river, in latitude 26° 40', the result of observations made by the expedition I have the honor to command, in its pursuit of the Indians and its explorations of south Florida, during the past season. The track of the command, in its various expeditions in canoes through the Ever Glades and swamps, is delineated in red ink. The position assigned to every point named on the chart was obtained from actual observation.

Although our efforts to meet the enemy were not rewarded with more frequent success, this chart, showing our route of nearly five thousand miles through swamp and morass, paddled over in canoes, will evince to the department the eagerness and persevering energy with which he was sought by every officer and man I have the honor to command.

Respectfully, sir, I have the honor to be,

JOHN T. McLAUGHLIN,
Lieutenant Commandant.

The Hon. GEO. E. BADGER,

Secretary of the Navy.

FLORIDA EXPEDITION,

Flirt, at Indian Key, October 8, 1841.

Sir: * * * * * *

From information obtained by Lieutenant Commanding John Rodgers, at Tampa bay, we have every reason to believe that the hiding place of Jones and his party, represented to be 57 warriors, is on the western skirts of the Big Cypress, in the Ever Glades. Our guides profess to know the spot designated, and with a detachment from the Wave, Otsego, Van Buren, and marines, I shall start at daylight to-morrow to hunt him out. In the meantime this vessel will keep the western coast between the Caloosa-hatchie and Cape Sable.

* * * * * *
Respectfully, sir, &c.,

JOHN T. McLAUGHLIN,
Lieut., Comdg. expedition.

The Hon. A. P. UPSHUR,

Secretary of the Navy, Washington city.

FLORIDA EXPEDITION,
Flirt, at sea, off Caximbas, October 25, 1841.

SIR: * * * *

On the 10th of the month, with two hundred men, we ascended Shark river into the Ever Glades, and after visiting all the intermediate islands, reached CLikikis, on the morning of the 14th. Here, by appointment, we met Captain Burke, of artillery, with 67 men, whose movement from Fort Dallas, on the Miami, was simultaneous, and in co-operation with that of this expedition. Having joined the forces, we proceeded immediately to the Prophet's Landing, on the borders of the Cypress. Finding no indications of a recent presence of the Indians here nor at the islands visited, we retraced our steps to the south and west.

On the 19th instant, after worming our way in the mangroves, through a small stream called the Tiat-ka-hatche, we opened into a grassy lake studded with islands, and in the distance discovered two Indians in a canoe. Pursuing their trail, it led to the fields they were cultivating, which we reached as they were leaving them. Their packs, cooking utensils, provisions, and three canoes fell into our hands. The party was supposed to be an advance of the prophet's people, and consisted of 10 or 12 persons. A force followed them for part of two days until the trail could no longer be traced. After destroying the growth of the islands, consisting of from 50 to 60 acres of pumpkins, beans, peas, &c., we continued our course to the sea and emerged from the Ever Glades fifteen miles north of Cape Roman. Here I returned to this vessel, and the command, under Lieutenant Commandant John Rodgers, has continued its route to the Caloosa-hatche.

Respectfully, sir, &c.,

JOHN T. McLAUGHLIN,

Lieut., Com'dg. expedition

The Hon. A. P. UPSHUR,

Secretary of the Navy.

FLORIDA EXPEDITION,
Flirt, at Tampa Bay, Oct. 30, 1841.

SIR: I have the honor to report to you that this vessel reached Punta Rassa on the 26th, and the detachment of the expedition under Lieut. Com'dg John Rodgers on the 27th instant.

The post at Punta Rassa was completely swept away by the hurricane of the 19th instant, the waters of the sea having covered it to the depth of four or five feet. The steamboat Isis was left on dry land at the receding of the waters, and the post was without the means of communication with Tampa or elsewhere. In consequence, I received on board Major Belknap, and a party of thirty Indians, who had come into him at Fort Deynaud, and had been awaiting transportation to Tampa Bay, and proceeded immediately for this place, which we reached yesterday.

* * * *

I shall return to Punta Rassa this evening, whence, with the detachment now awaiting me there, I shall descend the Caloosa-hatchie river into the Ever Glades, and, crossing at the southern extremity of Lake Oke-chobe, seek the source of the Loocha-hatchie river, and descend to Fort Jupiter.

On the banks of this river Jones and Tustenuggee have combined their parties, since the quarrel and separation between the former and the Prophet.

Resp'y, sir, &c.,

JOHN T. McLAUGHLIN,

Lieut., Com'd'g expedition.

The Hon. A. P. UPSHUR,

Secretary of the Navy, Washington city.

FLORIDA EXPEDITION,

Flirt, at Indian Key, Nov. 25, 1841.

SIR:

On the 3d instant the detachment, consisting of 150 seamen and marines, and two companies of artillery, 60 strong, under Lieut. Ketchum, descended the Caloosa-hatchie river and passed thence into the Ever Glades through Lake Thompson. On the 8th, emerging from a cane brake, through which we had been two days breaking a path, we struck upon a fresh trail, which carried us to a landing in the Pine barrens, between lakes Thompson and Oke-chobee, in latitude $26^{\circ} 45'$ north, longitude $86^{\circ} 10'$ west. There we found a canoe, and a few miles eastward of it a large boat, which had been taken on the Caloosa-hatchie at the massacre of Col. Harney's command. Fresh horse trails were found, and the fires burning, but the foe had gone.

we finally prosecuted our route to the eastward on the 12th instant. The whole country here abounds in signs of the recent presence of Indians. Following a large trail, it carried us near the Oke-chobee, which we entered on the evening of the 13th instant, in lat. $26^{\circ} 58'$, long. $81^{\circ} 3'$, having crossed that morning a beautiful lake, hitherto unknown to us, called by the Indians Hiok-pó-chè. This lake is about six miles in length and four in breadth, and is situated (its centre) in lat. $26^{\circ} 46'$, long. $81^{\circ} 00'$. Following the south shore of the Oke-chobe, we reëntered the Ever Glades, through the Cypress, on the 16th instant, in lat. $26^{\circ} 52'$, long. $80^{\circ} 32'$, having been prevented from continuing our course around the lake by a very heavy wind and sea, in which several of the canoes had already swamped. We did not reach the source of the Loocha-hatchie until the 19th instant, when it would have been impossible to descend that river to Jupiter and return here in time for the intended coöperation with Col. Worth on the 25th instant. We accordingly hurried through and reached here last night by way of

Snake Creek, Rio Ratones, and Key Biscayno. A chart of this scout will be transmitted to you as soon as it can be prepared.

If our labors have not been rewarded with the capture of any of the enemy, they have at least gained us information of an extensive country which had never hitherto been explored, and exhibited an imposing force in the heart of a country hitherto deemed impenetrable, the tendency, &c.

Resp'y, sir, &c.,

JOHN T. McLAUGHLIN,

Lieut., Com'dg expedition.

The Hon. A. P. UHSHUR,

Secretary of the Navy, Washington city.

FLORIDA EXPEDITION,
Flirt, at Indian Key, January 30, 1842.

SIR: I have the honor to enclose you a copy of Lieutenant Commandant Marchand's report of his scout into the mangroves, whence he returned on the evening of the 27th instant.

It is supposed by the guides and friendly Indians, that some of the prophet's people may have sought shelter on the Cocoa-nut island referred to in Marchand's report; whilst the water is at this low stage, it cannot be approached in our canoes.

Respectfully, sir, &c.,

JOHN P. McLAUGHLIN,

Lieutenant, Commanding expedition.

The Hon. A. P. UPSHUR,

Secretary of the Navy, Washington City.

U. S. SCHOONER VAN BUREN,

Indian Key, January 27, 1842.

SIR: I have the honor to inform you that, in obedience to your orders of the 13th instant, I took the force assigned, and entered Florida through Shark river, proceeded from it, through numerous mangrove lakes, to an old settlement on the banks of the Owechatta river. This settlement appears not to have been occupied for three or four years. It is advantageously situated, having a plentiful supply of fresh water from wells, and a communication by land is reported to Cape Sable and the hunting grounds to the eastward of that cape.

The Indian guide informed me that Tal-la-so-cul-sa, an island on the southern edge of the Ever Glades, about equidistant from the Miami and Shark rivers, was an occasional resort of the Indians; and, endeavoring to get there, I passed from Owechatta river into O-we-had-ka-thloc-co bay, coasted along its eastern bank, and ascended the Muc-co-thlo-pa river, but was unable to reach the Ever Glades by reason of the lowness of the water. I

descended it, and from the same bay entered the O-we-ki-e-wa river, and ascended to the Ever Glades, but could not penetrate them for the same reason. I then returned to and crossed the O-we-had-ka-thoc-co bay, entered one of the mouths of the Hatche-chop-co or Shark river, ascended to and entered the Ever Glades.

I found the water in the Ever Glades so low, that it would occupy a time exceeding that limited me to reach Tal-la-so-cul-sa island, and caused me to return to the sea by the way of Harney's river.

On my return, I visited Kay Largo, and found the old Indian settlement had not been occupied for some years, and the guide was unacquainted with the locality of the negro settlement.

At no time during the expedition did I discover recent traces of Indians.

I am, sir, very respectfully, your obedient servant,

J. B. MARCHAND,

Lieutenant Commanding.

To Lieut. Comm'd't J. T. McLAUGHLIN,

Commanding Florida expedition.

FLIRT, AT HAVANA, March 3, 1842.

SIR: * * * * * The Otsego reached here yesterday, bringing me despatches from you, as also from Lieutenant Commandant Marchand, in the Ever Glades, (a copy of whose report I have the honor to enclose.) * * * *

And it is not a little singular that the abiding place of the enemy should have been found within ten miles of a military post, whilst operations against him have been carried on by troops from that post for the last three years. * * * *

Respectfully, sir, &c.,

JOHN T. McLAUGHLIN,

Lieutenant, commanding naval forces in Florida.

The Hon. A. P. UPSHUR,

Secretary of the Navy, Washington.

FORT HENRY, February 24, 1842.

SIR: I have the honor to inform you that, in obedience to your orders, on the 11th instant, I took the available force of the Van Buren, Wave, and Phoenix, and entered the Ever Glades by the way of Harney's river, but, by reason of the lowness of the water, was unable to approach nearer than 15 or 18 miles to Cocconut island with the canoes. On the 16th, I despatched Lieutenant Commanding C. R. P. Rodgers, with the available force on foot, to visit Cocconut island. Upon his return to the canoes, on the 20th, he reported that the day following his departure he saw three Indians, &c. * * * *

The next morning, at an early hour, Lieutenant Commandant Rodgers, with his command, unexpectedly reached Cocconut island, where they found an Indian camp, supposed to have been composed of fifteen families, which had been abandoned the preceeding evening. Following upon the trail to the pine land, he found another camp, which had been composed of about three families, abandoned on the morning of the day he reached it—the fires still burning and provisions partly cooked. He then continued upon the enemy's trail in the pines in an easterly direction, until it was lost on the limestone rocks. * * * *

At Cocconut island, as well as at the camp in the pines, a large quantity of dried compty was found. Search was instituted for canoes and two found and broken up. The guide Chici thought the Indians were preparing fields for cultivation; he estimated the number of warriors, at the two camps, at eighteen, and the number of souls from sixty to seventy.

As the trail led in the pine to the easwtard, and to obtain a position for the canoes near the main land, the more readily to furnish supplies to those engaged upon the scouts, I determined to change my position, and, on the 21st, left for this place, which I reached this day. On the way here I fell in with the trail of three canoes, which had been made two days before, and tended along the land to the southward and westward. I followed as long as the guide could distinguish them, and, when lost, returned on the back trail. Upon an island which the trail passed I found six sacks of dried compty, which had been carefully stowed away three days before. I destroyed it, and, still upon the back trail, I reached an island upon which the Indians had encamped. * *

I am sir, respectfully, your obedient servant,

JOHN B. MARCHAND,

Lieutenant Commanding.

* Lieut. JOHN T. McLAUGHLIN,

Commanding Florida Expedition.

KEY BISCAINO, March 23, 1842.

SIR:

* * * *

On the 9th instant, with detachments of men from the Van Buren, Otsego, Phenix, and Wave, I left Fort Dallas and entered the Ever Glades, following the main land to the southward and westward, approaching it as near as practicable, with the present low state of the water, searching the various islands for the hostile Indians and their settlements. On the following day, I found upon a small key, remote from observation, a large quantity of prepared compty, deer skins, articles of clothing, and cooking utensils, carefully preserved, and two cabins which had been erected about a week previous. I destroyed every thing useful to the Indians, and continued in the same direction upon the trail of four of them travelling on foot to a small key, upon which they had encamped,

remaining two nights, and had been abandoned four days previous; their trail, which we soon lost, then leading over a rocky bottom, and through shoal water towards Long key. On the 11th instant, we had reached a distance of about eight miles from Cocoanut island, where the extreme shoalness of the water rendered the canoes useless. From this point I despatched Lieutenants Commandant Biddle, and C. R. P. Rodgers, each with detachments of men on foot to scour the country, to the southward and westward, after a most fatiguing march of three days returned. The former reported that, in company with Lieutenant Commandant Rodgers, he followed the edge of the pine land to the southward, until reaching Cocoanut island where they separated, he taking a westerly course to examine the pine keys in that direction, and on his return to the canoes searched the numerous islands between Long key and the main land. He discovered no Indian trail of less than four days old, which upon following were lost in the pines.

Lieutenant Commandant Rogers reported that, upon leaving Cocoanut island, he crossed the pine barrens in a southerly direction, and penetrated some distance into the mangrove keys, and, finding no indications of Indians, he again entered the pines, and pursued it until he reached the trail he made from Fort Harney on the 26th ultimo, when he returned with his command to the canoes.

On the route he pursued no very recent indications of Indians having been there was perceptible.

On the 15th instant, from the same point, I despatched acting Lieutenant Lovell, with a detachment of men, to proceed in a westerly course and examine a portion of Long key, and the islands laying to the westward of it. He informed me that, soon after crossing long key, he struck the trail of ten Indians leading to the northward and westward, and following it reached an island upon which they encamped three days previous, and finding that several of his men had broken down, he was compelled to return to the canoes. No Indian settlements were seen by him.

I then concluded to continue my operation in canoes, as the men were unable to do so on foot, in consequence of which I passed to the eastward of Long key, near where I found a field containing an acre with thriving corn, &c., growing, which I destroyed; and in the Ever Glades, to the northward of that key, several islands, which had been inhabited and cultivated, but abandoned from 18 months to three years. Supposing the trail seen by Lieutenant Lovell led to the Big Cypress, I crossed the Ever Glades to the source of Sharks river, and by a different route reached the head of the Miami without finding any; from which circumstance I infer that the Indians are concealed somewhere between Cocoanut island and Cape Sable.

I have the honor to be, very respectfully,

J. B. MARCHAND,

Lieutenant commanding.

Lieut. Com. J. T. McLAUGHLIN,

Commanding Florida Expedition.

FLIRT, AT KEY BISCAYNO, *March 27, 1842.*

SIR: I have the honor to enclose you a copy of Lieutenant Commandant Marchand's report, of his recent scout into the country south of the Ever Glades and between Cape Sable and the Miami.

Accepting the supposition of Marchand, that the enemy has taken shelter near Cape Sable, Lieutenant Commandant Biddle has been despatched into the mangroves on the route traversed by Marchand, in January last, a copy of whose report I had the honor to enclose to you, with instructions to beat up the haunts there, and drive them back upon the pines; while, with another detachment, he will keep a look out upon the neighborhood of Cocconut island and Long key, to prevent any escape from that quarter into the Big Cypress.

Respectfully, sir, &c.,

JNO. T. McLAUGHLIN,

Lieutenant, commanding naval forces, coast of Florida.

Hon. A. P. UPSHUR,

Secretary of the Navy.

FLIRT, AT INDIAN KEY, *April 29, 1842.*

SIR:

Lieutenant Commandant John Rogers, with a detachment from the Madison and the marines, returned on the 10th instant from a scout into Okechobee, Kissimee, and Tohopkeliga, under his instructions of February 1, a copy of which I had the honor to enclose you on the 15th of that month. The duties performed by this detachment have been of the most arduous character. Since the 9th day of October last, excluding an interval of twenty days, they have been employed without intermission in canoes. Every portion of the Ever Glades and water courses of the interior, from Lake Tohopkeliga south, have been visited by them and examined, and large fields and settlements broken up and destroyed. A copy of Lieutenant Commandant Rogers's highly interesting report will be forwarded to you.

Immediately on the return of Lieutenant Commandant Rogers, Lieutenant Herndon was sent with his command, in the Madison, to bring off a garrison left with supplies on Fish-eating creek. He will ascend the Caloosa-Hatchee, and thence cross the country to Fort Centre.

Since the return of the party from Okechobee, Lieutenant Sloan, of marines, has been and is still employed with his command on the compty grounds, between the Miami and New rivers, with instructions "to explore every acre of ground."

In the meantime the residue of the force, under Lieutenants Commandants Marchand and John Rogers, divided into small par-

ties, will endeavor to feret out the party of the enemy still in the south end of the peninsula. The attention of these officers has also been directed to three rivers, having their source in the Big Cypress, on the western coast, and emptying into the gulf near Fuche-hatehe, Biddle's harbor, and Nokosee Cayo. These streams have never yet been visited by whites, and were once haunts of the Indians.

Yesterday morning the Flirt found the brig Statira, Babbidge, master, with a cargo of sundries, from New York on the 11th April, bound to St. Marks, ashore on the reef to the southward, and in sight of Cape Florida light-house.

Respectfully, &c.,

JOHN T. McLAUGHLIN,

Lieutenant, commanding naval forces, coast of Florida.

The Hon. A. P. UPSHUR,

Secretary of the Navy.

No. 27.

Extracts from the journal of Lieutenant Francis Martin, commanding the revenue cutter Wolcott in 1847, and notes from memoranda of Buckingham Smith, esq.

August 31, 1847.—The cutter came to anchor in Biscayno bay, within two miles of the mouth of Miami river.

September 1.—At 9, a. m., Mr. Smith and Lieutenant Martin left cutter with a boat's crew, and proceeded to the Miami. They landed at Fort Dallas, and afterwards ascended the river to the Ever Glades. They supposed the distance to be about four miles. About a mile up they observed an opening, which they were informed was a creek, upon which, they were told, was a small compty mill. About the same distance further they came to a small settlement, made by Mr. Marshall, who had accompanied them in the boat. About one mile further, the river forked, both forks coming from the Ever Glades. They ascended the right or northern branch, and soon felt the full force of the stream, and, before reaching the head, it became rapid for a few hundred yards, and altogether too strong for the ascent of the boat. Here remains a mill for cutting pine lumber and grinding compty, but at present abandoned. The general course of the river is about west. At 2, p. m., the boat returned with a load of water and sugar cane, the latter procured at the plantation of Mr. English.

NOTE.—It was quite apparent that the fall from the Ever Glades at the head of the fork of the Miami we ascended, was as much as twelve feet to the mouth of the river. A drain from the head of the river into the Glades could be made without great expense or labor. But the river could not be made navigable into the Glades without great outlay.

September 2.—At 8, 30, a. m., Mr. Smith and Lieutenant Martin went with a boat's crew to explore the rivers running from the Ever Glades, and returned at 9, p. m.

The party first proceeded to find "Arch creek." They ran along the western coast towards the head of Biscayno bay, and within 100 yards of the shore. A few miles from the Miami they found an opening about 100 feet wide, and entered it. The course of this stream (Little river) was about W. SW., and making sudden and regular changes through the whole its of course. At the end of four miles they found an old mill race, about 100 yards in length. The current descended rapidly. They found four settlements, abandoned, upon which were still growing sugar cane and forest trees. The depth of water at the mouth was eight feet, falling sometimes to five, until reaching its source, when the depth was about twelve inches, through which the boat was hauled the distance of twenty yards. The bed of the river throughout was limestone rock, like that of the Miami. They found an abundance of wild grapes and cocoa plums. They left the river at midday, and continued on, at the same distance from the shore, about twelve miles, which took them to the river *Ratones*, having discovered no other entrance in their course. In the last mile of the course, the bay gradually decreased to a point, and curved as gradually to the westward. The entrance of the river was about 100 feet wide, and near it was perceptible a small opening to the north. They ascended the river about two miles. Its width was about 100 feet, when it branched in prongs of equal size. They took the northwest fork, and ascended the river a little way, and left another opening of equal size on the left, and entered a lake. The depth of the river was but eight feet, and the entrance of the lake two feet. It was nearly round, and about one mile in diameter. They sailed round it, but found no outlet, the current setting in. One of the men climbed a mangrove on the north side, and descried the ocean about three-quarters of a mile off, east. The depth of the lake was about five feet, and the bottom limestone. They now returned, and took the opening which they had passed, leading to the west, up which they continued four miles further, the stream gradually contracting after the last change of its course, and the current, which at first had only been perceptible, became very rapid. The sun at this time was about an hour high, and there appeared to be trees all along the western horizon, at the distance of two or three miles further. They were forced to return, as the crew were very much exhausted, having performed a journey of about sixty miles. Arrived at cutter about 9, p. m.

NOTE.—Arch creek lies about five miles north of "*Little river*." Its entrance is small, and liable to be unobserved in passing it, being covered by trees. Hence we missed it. There were a few oaks and many grape vines and cocoa plums on the sides of "*Little river*" at its upper end. They were in a soil of vegetable deposit and lime rock, quite black and rich. At the lower end the river passes for the most part through small and broken savannahs of black soil and rock, and is 100 feet wide; at its head it is not more than 50 feet wide. The western margin of Biscayno bay, above Miami, is generally skirted with mangrove trees, not however extending far back. The sugar cane found on this river was of large size and excellent quality. The mill at the neck of the river has been used for making *compty* flour. The remarks before made in my note respecting the Miami may be repeated as to the branch of this river we ascended.

The lake at the head of the N. W. fork of the *Ratones* is called "*Dumbfoundling Lake*." It is a beautiful sheet of water and entirely secluded, one third of the circumference of its shores, and one side of it is *prairie*. The other sides are densely covered with mangrove

trees. Snake creek comes from the north and empties here ; its mouth is concealed by the boughs of overhanging trees. Our course, up the branch of the *Raton*es we last ascended, was generally W. S. W. for about five miles, and then changed to W., when the river began to contract to less than its general width of 100 feet and became rapid. We went up, however, some distance. When we turned back we supposed we were three or four miles at least from the Glades. The water in the branch we ascended was never less than five feet. The fall was apparently as great as in the Miami.

September 3.—Mr. Smith and Lieutenant Martin, with a boat's crew, visited the Miami.

September 4.—Mr. Smith and Lieutenant Martin, with boat's crew, left the vessel to visit "Arch creek." At 2, p. m., the boat returned. The party touched at the Miami, "and found the entrance of the creek about nine miles beyond it, and about five miles beyond that of "Little river." Its entrance was shallow, but immediately deepened to ten feet. They had not proceeded over four hundred yards when the course of the boat was effectually stopped by a fallen tree which lay immediately across the stream, which they found impossible to remove, or to lift the boat over, or force a passage by any other means. The water here was ten feet deep, and passing out with some current. The party returned to the "Miami," and soon after to the vessel.

NOTE.—The tree across the creek was a large mangrove. The arch across the creek is about two miles from its mouth. It is of solid limestone rock, extending across the creek, which is about forty feet wide. The rocky banks are here ten or twelve feet high. The arch is two feet above the surface of the water. The creek for one hundred and fifty yards above and below the arch has precipitous banks of rock, and the water rushes down with great rapidity.

September 5.—At 8 30, a. m., Mr. Smith and Lieutenant Martin left the vessel, with a boat's crew, and returned at 6, p. m.

The boat and exploring party left the vessel and stood to the southwest. This was in consequence of understanding, at the "Miami," that the Indians had recently been there, and probably could be called in by making a signal at the "Hunting grounds." The object was to obtain one of them for a guide among the Ever Glades, there being no other person claiming to have any knowledge of them over a dozen miles from the head of the Miami and neighboring rivers. They ran along the western coast for about fifteen miles from the Miami, when, having previously turned a point and passed an island, they came to a small place settled by Mr. Duke, having landed about 11, a. m., and built a fire and raised a smoke to signalize the Indians to come in. The neighborhood was then examined, and, in a hammock near by, were cut out two small fields, wherein was growing corn, cane, pumpkins, some banana trees, and lime trees. There were no tracks or other indications of any person having been there for a long time. At 3, p. m., made sail in boat to return, and, at 6, p. m., arrived on board.

September 6.—At 8 30, a. m., Mr. Smith, Lieutenant Martin, and Lieutenant Herndern, with the "batteau," four men and a boy, started upon an expedition in the *Ever Glades*, towed by the gig. At 4, p. m., the gig returned, after having towed the "batteau" up "Little river" to the entrance of the *Ever Glades*.

Not being able to procure a guide for the *Ever Glades*, and none

of the settlers about the Miami pretending to have been further than 13 miles into them, Mr. Smith determined to proceed by compass. In ascending the river the boats were poled for the last half mile. The gig left us at the entrance of the Ever Glades, about mid-day. In proceeding, found the current very strong against us—say, for two hundred yards—the channel gradually widening and losing its depth of eight and ten feet until it expanded in flats two and a half feet deep. We supposed the tide rose fifteen inches, at least, at the mouth of the river. There is six feet fall from the head, and a foot more at this distance, in the Glades, at least. We ran a course southwest along the shore of the main, for the distance of three miles or more. The land was thickly covered with pine trees. The land on the opposite side appeared to converge with this shore, forming an angle of 33 degrees, and these appeared to go southwesterly; while the land on this side tended to the northeast. Within this bight arose many islands, some of them three or four hundred acres, of a low and scrubbed growth. They appeared to have little soil, and the trees to grow from the water. On the southwest side of the bight was a large island of heavy growth, but too distant for us to ascertain anything further respecting it; the main land adjacent was covered with pines, back to the head of the river. Upon leaving this point we put up a staff and flag, and continued our course northwest, supposing that to have been the direction of Sam Jones Island. At the end of five miles we erected a pole and flag, from the top of a tree. In this last distance the water stood in the reaches at two and two and a half feet deep; the bulrushes and saw grass were from two to six feet, or more, in height. We had passed many islands, from a rod square, and containing a single tree, to a quarter of an acre or several acres in area. They were reported from a tree top, which one of the men ascended, to extend far away on every side; they stood within gun shot of each other. The grass was often interspersed with wild myrtle, effectually preventing the passage of the boat; the men frequently got out and forced her over from one reach to another. The bottom, when tried, proved to be sometimes of sand and sometimes of lime rock. In the afternoon we raised our awning against the rain, and at night we all slept in the boat under the storm covering.

NOTE.—The openings through the Glades to-day, (the 6th,) were generally N. W. and S. E. We fell in with many small islands during the day. Our general course was N. W. and we may have gone seven or eight miles from the head of the river. We kept near to the shore. The report, and the general note at the end of the journal of this expedition into the Glades from the Miami, gives all the incidents we noted.

On the 7th of September we had an early breakfast, and continued our course to the northwest. The water increased in depth to three, three and a half, and four feet. The bottom of the Glades was covered deeper with the deposite; the saw grass grew a little higher, say seven feet. We passed over two alligators in our course, and fired at and wounded a large bird, of a species none of us had met with out of the Ever Glades. In the latter part of the day there was a considerable quantity of sediment at the bottom of the water;

the depth of the deposite was from a foot and a half to two feet, which we principally found in crossing the reaches. It appeared to be the decay of water mosses, without any other admixture, and was in powder. We saw nothing in this expedition like mud. As we proceeded it became the subject of remark, that the reaches lay in direction northwest and southeast. When any of these channels gave out, the boat was drawn over to a neighboring one, as easier than seeking a point where they might come together. About mid-day we nailed a piece of bunting to a staff, and lashed it to the top of a tree. Large islands were seen easterly and westerly. We proceeded about six miles from this point, and stopped half an hour before sunset at an island of large trees. There proved to be only land enough on it for boiling the coffee pot. Here the men found a bottle. They hung their hammocks in the branches where they spent the night, and the officers slept in the boat. We conjectured that we had travelled between fifteen and twenty miles from the land in a direct line. The main land was not to be seen in a direct line.

NOTE.—The constant cry of the wild fowl roosting on the trees, and the great number of musquitoes that annoyed us, deprived us of sleep and rest. I saw in the morning with a spy glass several large islands east and west. We named this island "*Bottle Island*."

September 8.—In the morning early the boat was pushed through the grass to the west of the island, and we tried to gain a course, as the reach we had come in so far was exhausted. In this water we found but one outlet, and that narrow and deep; the grass dense; and the men standing waist deep in the water, could not force the boat through it. It was a passage only for a light canoe. After an ineffectual effort to force a passage, we returned to the island and got breakfast. An Indian brass kettle was found on it. On the top of one of its trees we left a flag, and from thence the country was minutely examined with a spy-glass. To the east-northeast, six miles distant, there was an island several miles in extent. To the west, about four miles distant, there was another island, not so large, and two smaller islands in advance of it. We were nearly in line between them. The view was open to the north and northwest, and nearly free of islands. Behind us, and in the course we came, they were scattered in great numbers. We returned to the anchorage of the night, and there tried for a passage to the northeast and southwestward, both without success. We returned upon our course, searching for outlets to no purpose. About mid-day we passed our third flag about 400 yards westward, which to our mortification was all we had been able to gain to the eastward. Shortly we approached an island covering five acres. Several of the men went to it, and reported that it contained half an acre of ground, upon which were many terrapin shells, and had apparently been an old field. The soil brought to the boat was apparently the decay of hard wood, and of the color and coarseness of chocolate grounds. We proceeded, and about four miles further, and still working easterly, in about four miles, the water decreased to $2\frac{1}{2}$ feet depth, and hard bottom. The water here

seemed to spread; but whenever it took any marked direction, it fell into its former courses. We saw several terrapins yesterday and to-day. The cocoa plum again made their appearance among the islands, first the white and afterwards the blue.

NOTE.—The outlet we found in the morning had doubtless been made for canoes some time before. The saw grass hereabouts was eight feet high or more. The men stood waist deep in mud and water in attempting to get the batteau through.

September 9.—Started at sunrise, after breakfast, having landed on an island containing two acres for such purpose. At 8, a. m., we found ourselves only half a mile to the eastward of our second flag. The waters tending to the southeast, and over sand. We had a heavy fall of rain, accompanied with wind from southwest, which lasted about an hour and a half. We reached the main and passed through by the same course that we had left the river, and passed over the dam at three o'clock, p. m. We reached the schooner at dark.

NOTE.—It was my desire to reach the northern end of the Glades, and the region of Lake Okechohee on this expedition, and to examine the islands above *New river*, but I found I could not, without great delay and trouble, and therefore abandoned it. It was not deemed proper to detain the cutter longer on the coast than was absolutely necessary, as she would be exposed to the hurricanes that usually occur in this and the next month. But I concluded to make another expedition, to start from the Miami into the Glades westwardly. I had supposed I could go up in the Glades from the most northern part accessible from Biscayno bay, and that my failure was from my ignorance of the way and want of a pilot; but I have since ascertained from others that our progress from such point northward would have increased our difficulties; and that the northern end of the Glades can be best reached from Jupiter inlet, and that the explorer should traverse it on foot, and before the heavy rains occur. The journal of the second expedition, which was from the Miami, follows, and the notes to it are given hereafter.

September 10.—The crew were employed altering the "batteaus" storm covering, and preparing for an expedition in the Ever Glades.

September 11.—At 7 45, a. m., the same party left the vessel upon another expedition into the Ever Glades, towed by the gig. At 2, p. m., the gig returned, after towing the "batteau" to the entrance of the Ever Glades, via the Miami river.

At 10, a. m., being at the head of the river, the gig left us and we passed into the Ever Glades, by a wide opening, at times twelve feet deep. The land lay on the right and left, the shore W. by S., the other shore W. by N., and we passed out about three miles, the land on both sides forming an angle. We kept along the left shore, and when we parted from it were about three-quarters of a mile to the north, the waters standing two and a half feet deep, and remained so for over five miles, which point we marked with a flag. Our course from the first was due west, and half an hour before sun set, we reached an island surrounded by trees, and containing two or three acres of cleared land. The men who went on shore reported that no large islands were to be seen, and that there was about a quarter of an acre in the middle of the island that was above water. The soil was black and rich, and covered with growth, apparently of a single year. A few terrapin shells were lying upon the ground, and some of the trees bore the gashes of the axe made a long time ago. We remained here over night.

We slept in the boat and left a flag. The water stood here from three to three and a half feet deep. We supposed ourselves to be about 13 miles from the head of the Miami.

September 12.—We still continued our course west. At 11, a. m., stopped at an island with a garden spot. Soon two islands of about the same size appeared on the west, the other to the north. About a mile and a quarter from the island we placed a white flag, and changed our course to NW. The reaches in this neighborhood are well marked and run nearly north and south, a little further in, an island was seen to the W. SW., half a mile off. About two and a half miles further in we came upon another island, and from this course we were forced to the N. NW. The distance from land was twenty miles. Here we stopped all night.

On the 13th September, we continued our explorations, stopping at several different islands. We stopped an hour before sunset at an island about two acres in size, having a quarter of an acre or more of its interior free from trees and grown up in weeds. Here was a fallen tree of considerable size, and which must have lain here many years, it was still growing and its branches formed the highest in the island. The roots spread over ten feet in diameter and had grown back and had braided in the mould and earth that had been torn up with the fall, and which contained broken pottery, shells, and other animal matter, which must have been of great age, and the same relics were found on the soil everywhere, and to the depth of two feet.

NOTE.—There were deer on this island. We discovered their tracks. They had fled on our approach. The draining of the Glades would greatly increase the area of most of the islands, leaving channel ways between them that would be clear of mud and deposit. The borders or shores of these channel ways would probably have in many cases to be embanked, leaving such channels with clear rocky bottoms of six, seven, and eight feet water, and the deposit confined within the levees. Those parts of the islands thus extended could by artificial means be then easily irrigated in seasons of drought, if found necessary, from the rivers thus made. That such rivers would, if the Glades are drained five feet or more, still be found running between the islands and the beds of deposit, from one end of the basin to the other, and reaching laterally across it, I do not doubt.

September 14.—We left the island in the morning three-quarters of an hour after sunrise; some time before reaching and after passing the island there grew up in the saw grass occasional shrubs of wild myrtle and the honey suckle, &c. Four miles to the NW. of us lay an island and about the same distance west another. For the last four miles there was an absence of single trees, but there were some clumps of trees growing out of the water. By a course NW. we reached the island last mentioned. It covered two or three acres; had a garden spot rather larger than any we had before seen, and wherein the Indian potato was growing thickly and in great luxuriance, so that the whole ground appeared to be filled with it. A single papaw and an alder bush were growing. We discovered by the ground that we had disturbed the feeding of some deer. Pebbles of limestone, bone, and sea shell were above and below the surface. We left a flag; it was 11 o'clock, a. m., and an island bore three and a half miles to the NE. At an hour and a half before sunset we stopped at an island and reckoned our

travel to-day about 10 miles; the course N. NW., and the depth of water two and a half feet. The view before us was free from islands and trees.

September 15.—We left the island an hour before sunrise. Three miles on our way we saw the top of a palmetto tree bearing to the W. and about three miles off. We were then standing to the N. NW., and at the same time there appeared a long low island between three and four miles away, and to the E. NE. We reached the Palmetto island by a sudden opening to the west through the Glades. It contained some two or three acres, and had a garden ground the size of an acre now growing up in trees of the custard apple, and seemingly four or five years old. It had a higher growth about it, and even like a hedge. The palmetto in the midst had been permitted to stand as a look-out. From it one of the men reported a large island in the distance to the south. Five islands lay in a string with this one, passing to the west and gradually curving to the north. Their numbers, as we proceeded, increased to several more. The first island was but half a mile off, the second about two miles. Our course was to the NW. from Cabbage island, and two miles from it, we stopped for the night.

NOTE.—The island above mentioned as having a garden on it is *Prophet's Island*. We saw from it some five islands to the west, and as we neared them, the string was seen to continue, and many more appeared to the N. W. Many single palmetto tree tops were seen from this place, scattered along the southwestern horizon. We found ourselves after sometime in an archipelago, the islands of which we designated as the Palmetto group. We saw land on the west from a tree on one of these islands.

September 16, 1847.—We started early, and continued the examination. The water, during the day, was two and a half feet in depth; the grass dense, running in long banks, and studded with myrtle. At times this mingled growth formed impassable barriers. Their width seemed to vary from two or three hundred yards to half a mile. The reaches lay along them nearly north and south. We reached an island, three and a half miles from the last. Small trees, of different kinds, and several cabbage trees were upon it, and a little piece of cleared ground. From a tree about twenty feet in height, land was seen to the west, running along for several miles. At 12 o'clock we reached an island, three miles further on, by a course running N. N W. It was like the last, but a little larger, and also had a palmetto upon it. Many islands were to be seen to the N. N E.; and before, as to the west, one island with two palmettos, bearing west, was particularly marked. Some twenty islands were in sight for some time past; a constant effort had been made to get westward to the land, and no nearer course could be made than N. N W., and the appearances of the reaches ahead of us offered us hope of arriving, without the consumption of much time and great labor. The course promised to be still more to the north. Under these circumstances, Mr. Smith consulted with the officers of the boat, and determined to return. He had himself directed the course for nearly the whole of the last two days.

September 17.—Our return was nearly over the same track by which we had advanced, as we found that any considerable devia-

tion from it led us to passages by which we could not arrive at known points. We passed the first Palm island N. N. E., and, in approaching it, we fell into a passage that carried us southwardly for the distance of five miles, and by which we were separated from the last flag, which we discovered with a spy-glass. By close examination of the marshes, a break was discovered, over which, with considerable exertion, the boat was passed, until we reached our course. In approaching the river Miami, we fell to the southward about two miles, and found ourselves in a bight, similar to such as make down to the river here, with numerous small, inundated islands. We passed around a point of pines to the northward, and over a low sand-flat, which was less than half a foot in depth, even at a considerable distance from the land. At 6, p. m., we entered the head of the Miami, and at 8, p. m., we arrived on board, which was on Saturday, September 18th, 1847, after an absence of eight days.

NOTE.—We had no guide or pilot in our explorations of the Ever Glades.

We were in a *bateau* of light draught, and well manned. She was 21 feet long, 4 feet beam at bottom, which was flat, and her draught was but 5 inches.

The *bateau* was forced along, generally by poles pushed against the bottom of the Glades, but often, in shoal places, the seamen get out and forced the boat along, they wading by her. We could not generally, in the Glades, in this manner, make more than 12 or 15 miles in a day. From the Miami, we supposed we went about 55 miles, though by very devious courses. Our track is indicated on the map by dotted lines.

The waters in the Glades at this time, we learned, were as high as they have ever been known to be. We did not discover any evidence of their ever having been higher. In *dry* seasons, as we were informed, they are from 20 inches to 2 or 2½ feet lower than at this time, leaving several miles (in some places 5 or 7, and even more,) of the margin of the Glades, now covered with water, dry; and it is said, persons have in seasons of drought, walked on dry land 10 miles from the shore at some points. We found no place where it was more than 10 feet to the rocky bottom of the Glades, and in general the depth was from 3 to 7 feet. The same cause, of course, in dry seasons, affects the depth of the rivers that are supplied with water from the Glades.

We found no stagnant pools in any of our routes, but the waters were limpid, even where the deepest, and were gently moving to the southward, not in channels or currents, but in a mass.

The bottom of the "Basin" is of lime rock. On the eastern side for a short distance from the shore, it is usually slightly covered with sand; pieces of rock, however, scattered over its surface. Where the waters of the Glades run into the heads of the rivers, there are coves or angular indentations in the shores of the Glades, and within these, there is generally found some sediment or mud with the sand. In these coves, also, are to be found deep holes or reservoirs. As the margin of the Glades is left, the bottom of the Glades becomes covered with sediment in increased quantity, the nearer the interior is approached. This sediment is a deposit of decayed vegetable matter, and in some places several feet in thickness, on the bottom of the basin; and it rises, in many instances, to within 8 or 10 inches of the surface of the water, and lies in beds or ledges extending generally northwest and southeast, covered with saw grass and wild myrtle. The boat poles were thrust down in this deposit in several places, 6 and 7 feet, before the rock bottom was reached. It is generally, however, from 2 to 4 feet thick. Marl, or pulverized limestone, was sometimes stirred up at the bottom by the poles. The deposit occupies three-fourths of the surface of the Glades covered with water. We examined it closely, but could not discover any adhesive material, nor any remains of stem or fibre. When dry, it is of the consistency of snuff. It is doubtless the accumulation of centuries, by the annual decay and fall into the water of the saw grass and other rushes, and shrubbery, in the Glades, and in a long course of time, might fill up the Glades except in channels.

Alligators, tortoises of various kinds, and among them the large soft shell turtle, scarcely inferior for the table to the green sea turtle; the garr, perch, and other fishes are to be found in the waters of the interior of the Glades.

We were not so fortunate as to discover any of the *Manatee* or sea cow. It is known that they once, and at no distant period, existed in considerable numbers in the Glades, and it is difficult to account for their present scarcity.

We saw but few birds, and no land birds, except the crow, which feeds on the custard ap-

ple, and red-winged black birds that seemed to feed on the eggs of the large snail, (*ampularia hopeioidensis*) deposited in the rushes. The egret, cormorant, heron, and other of the larger grallæ, were occasionally seen, but none of the lesser waders.

There are many islands along the shores. On the eastern side, they are not far distant from the margin, and are nearer each other than in the interior. An irregular chain commences about 5 miles from the mouth of New river northwest, and runs westwardly. Towards the middle of the Glades there are not so many islands, very few being within 2 or 3 miles of each other, and there are places where, for 5 or 6 miles in every direction, there is nothing but grass and water. The islands farthest in the interior, are approachable only through deep mud and grass, and water plants, in shallow water, and through shrubbery that thickly surrounds them, several yards in width, and often a girdle or hedge of trees standing in the water a short distance from their shores, seems to have grown there as their protection from the winds.

A few of the larger islands in the interior have trees of some size upon them, but several have but a single tree, and others are without anything but bushes and shrubbery, and with which all of them are covered in a close growth. The single trees seem to have been left or placed for purposes of signal, or to serve as look-outs. A lone tree is seen a great distance, and long before the island on which it stands can be discerned. The islands are of various areas, from a quarter of an acre to hundreds of acres. I could not make an approximate estimate of the number of islands within the margin of the Glades. There are, I suppose, several thousands.

Many of the islands were partly inundated when we visited them. The soil of those in the interior of the Glades, is very different from the soil of the main land near the margin, and from the deposite in the Glades. It is a rich waxy mould about 15 inches in depth, which was about the usual height above the water of the islands. This soil lies upon a cake of comminuted bone and vegetable fibril of 2 or 3 inches in thickness. Beneath this are pebbles about the size of lemons, of lime rock of an older character than belongs to the formation of Florida. These facts suggest that the base of these islands may be of drift.

Most of them exhibit evidences of having been inhabited, but there were no marks on but one or two of their having been so for many years. The surface of the soil of several of the islands, it appeared had been upturned at former periods some inches deep, doubtless in its cultivation.

On some of the islands are the bones of animals and broken pottery, in such large quantities as to indicate that they have once been thickly populated. I found no earthenware of European manufacture, or glass, or other indication that their former inhabitants were other people than Indians. In more than one instance, where a large fig tree had been prostrated by a storm, bones and pottery were found exposed where the roots were turned up. There is no doubt, that in all this region, once were spread that hardy and resolute people, who though savages, possessed enterprising qualities that are recorded by ESCALANTA FONTANADO, and celebrated in the pleasant verse of CASTANOS.

The saw grass springs from the deposite, though several feet below the surface of the water, and it is taller and more dense in the interior than near the shores. It grows to the height of 6, 7, and 8, and even 10 feet. The wild myrtle grows thickly with the saw grass in many places, and towards the western side, where the soil or sediment is higher and firmer and is formed into beds or banks, as I have stated, and is nearly level with the water, the growth makes quite a thicket, and prevents the passage of a batteau across the bed. These beds and thickets of myrtle and saw grass are in some places two or three miles in length. The openings through them are often not more than a yard in width, spreading occasionally into small shallow ponds. I have observed that the general course of these beds is northwest and southeast. On the western side, however, they are more north and south.

At ten miles distance from the rim or margin, and in places where probably the glades are never dry, the *Nyphe odorata* or pond lily first appears. There is a species I have not seen described found in Little river. It is like the white, except that it is smaller, and the color of the petals is that of straw, and the corollæ that of orange. Both kinds are without fragrance.

The cocoa plum (*Chrysobalanus Icaco*) is commonly found on the islands. The blue variety is not found as far in the glades as is the white. The sugar apple, (*Annona glaber*) a species of what is called the "sour sop," is usually found in the islands on the eastern side of the glades and the less fertile margin. The wild fig is also found upon them. These figs are of the same genus as the common fig, of which there are several kinds in South Florida very dissimilar in appearance. A journal (MS.) of the expedition of Colonel Harney across the everglades in December, 1840, thus speaks of the Florida Indian fig:

"This is a remarkable tree. It first makes its appearance as the creeper and seizes on the largest tree it can find, continuing to circle it in its meshes until it deprives it of life, when it feeds on the decayed matter and becomes a beautiful tree. Of two trees, each had attacked a palmetto; one was already dead, but the top of the other was still blooming in the centre, though completely surrounded."

The Indian "compt" grows wild in great quantities on the southern part of the peninsula, and is to be found on some of the islands. It is the *Zamia integrifolia*, and is com-

monly called by the whites "the Indian potato," or the "briar root." The art of making a flour or starch from it, like the "*arrow root*," has been known and practised from time immemorial by the Indians of Florida. The southern Indians, I am informed, possess the art of making a similar flour from the root of the saw grass of the Glades. They first expose it to the sun, on hides stretched on sticks or poles placed on the ground and elevated three or four feet above it, till it becomes perfectly dry. They then pulverise it and thoroughly wash it, in several different tubs or troughs of clean fresh water, till it becomes as white as the best wheat flour. I saw sticks standing in the water near to *Prophet's* island that had probably been used to place the hides on.

The native orange of East Florida, mentioned in the *Encyclopædia Americana*, is found throughout the peninsula, in the hammocks and swamps, and doubtless is on many of the islands, though we did not note it.

The gardens at the mouth of the Miami, three miles east of the Ever Glades, indicate the effects of the climate upon the vegetation of the country. That of Colonel William F. English, and his groves of various tropical fruit trees especially, exhibit its genial influences. The tree of the *Carica papaya* here bears blossoms and green and yellow fruit the year round. DE BRAHM says "its existence is an infallible criterion of the climate of that country being favorable to the cultivation of the sugar cane." Groves of the orange, the cocoa nut, plantains, bananas, limes, and lemons have been made; and there are guavas, citrons, sour sop, the sugar apple, pine apple, and sugar cane growing here in great luxuriance. A hedge has been made of the *Agave sisilana* introduced by Doctor Perrine, the plants of which have greatly multiplied since the war. Some neglected lime bushes are seen on an old settlement near the sea, fully thirty feet in height. They bear fruit, and of a very large size, quite abundantly. Any thing that grows on the *coasts*, no one, I presume, will doubt, could be as well reared within the *basin* of the glades, a few miles *west*, if it should be reclaimed.

On the southernmost shores of the peninsula the Royal palm is growing, and cocoa nut trees of great size also, and it is not doubted they will grow two degrees farther north.

Besides the trees common to the other parts of Florida, the palmetto, pine, cypress, live oak, red cedar, &c. &c., there is found in this region the *Exostema caribba*, or prince wood; the *Conocarpus esela*, or button wood; the *Hippomane mancinella*, or mangineel; the *Seviera febrifuga*, or Florida mahogany; the *Guaicum officinale*, or lignum vitæ and *Hammetil patens*. There are several species of the *Myrtaceæ*, principally trees known only to warm climates, and also several of the family *Sapotacæ*, among which is the iron wood. These are only a small portion of the hammock growth, for it may be said that nearly all the families of plants found in the tropical regions of this quarter of the globe are represented in South Florida. South of Cape Carnaveral the proximity of the gulf stream doubtless has its influence on the climate. We have perhaps to look to the Antilles and to Yucatan for identities of most of these productions, and it may be safely concluded that those not brought by human hands were brought from thence by the common means of birds and the drifting of the sea. I have been informed by a gentleman of Key West, who has paid some attention to the natural history of the peninsula and keys, and particularly to the character of its vegetation, that instances have come to his knowledge, of the apparently spontaneous appearance in that region for the first time, of trees, shrubs, and herbs, of families belonging to the tropics, and that an examination of the species will enable the botanist to identify most of them as belonging either to the West India islands, or to the southern coast of the continent beyond Cape Cartoche, or to the southern gulf coast.

September 20.—At 8, a. m., Mr. Smith and Lieutenant Cook, with a boat's crew, left the vessel to explore Arch creek, and at 7.45, p. m., boat returned.

NOTE.—We discovered nothing on this trip not mentioned heretofore. The appearance of all the streams emptying into Biscayne bay is very similar.

September 21.—Passed Cape Florida. September 22.—Passed Carysfort reef and Rodriguez island; anchored at Key Vacas. September 23.—Passed Bahia Honda, and arrived at Key West. September 25.—Left Key West by N. W. channel. September 26.—Made Cape Sable; came to anchor three miles from land.

NOTE.—We passed inside Carysfort reef. In the morning we anchored near to Ragged Key, (*La Parida of Ponce*) and next day proceeded to Key West, as above stated. On the 26th we had come north to Cape Sable to commence my reconnaissance of the gulf coast above the Cape to the Caloosa-Hatche, and of the western margin of the basin of the Glades. I noticed that Cape Sable is more rounding than is represented on most charts. There are marshy grounds near a part of the shore, and high woods a small distance back with lofty cocoa nut trees scattered among them, and extending eastwardly towards the straits. Where we anchored, about three miles from land, there was eleven feet water.

September 27.—Above Cape Sable, on western coast, at 7, a. m.; despatched an officer in the cutter to examine what appeared to be an inlet, and soon after despatched Lieut. Cook, in the gig, to examine another inlet. At 9, a. m., the first boat returned, and reported that no inlet was to be found. At 10, a. m., Lieutenant Cook returned, having discovered an inlet and proceeded up it about two miles. At the same time the vessel grounded about two miles from land, the wind light and variable, and the sea so smooth that no motion was perceptible; run out the kedge and hove off; stood off, then, into ten feet water, and then hauled to the north, keeping along the shore; found the water to be deeper, to twelve feet. At meridian, in latitude $25^{\circ} 17'$ north, stood to the northward and eastward. At 2, p. m., being abreast of Shark river, Mr. Smith and Lieutenant Cook left, in the cutter, to ascend it. At 3.10, p. m., anchored in two fathoms water, abreast of Shark river.

September 29.—At 5.30, p. m., boat returned from the exploration; got under way and stood to the northward and westward.

NOTE.—On leaving the cutter, as above stated, I went up one of the numerous inlets seen on shore. It had eight feet water and was 100 yards in width. Large arms of the sea opened to the right and left, a half a mile or less inland, and formed numerous islands covered with white mangroves. They were very little above the sea, and the soil, composed of mud and sand and vegetable deposit, appeared to be of little worth for cultivation, and a large portion of it not always entirely dry. Our course inland was generally northeast. The water in the sounds was very salt. There was no dry land on the islands near us, and we prepared to remain in the boat all night, about seven miles inland. The sand flies were exceedingly annoying, and the seamen preferred to row rather than lie still, and we went by moonlight five miles farther inland. We came to a large bayou or lagoon of salt water, no island or other land being within three-quarters of a mile from us, and being rid of all insects, we slept beneath the awning of the boat quite pleasantly. We had come up with the tide which made a current of four miles per hour. Next morning we proceeded farther north and east. We had seven feet water. After going up some distance we found the water less salt, and several small creeks were discovered emptying into the lagoon from the eastward. We followed one as near to its head as we could get. We went up it say two or three miles. We examined others. They branch and gradually lessen, are winding in their courses, and soon become quite shallow and narrow. They all have a current of fresh water from their heads, oozing through and overflowing the adjacent rocky lands. The cocoa plum, myrtle, and sugar apple were all seen growing here. The black bushy mangrove but a few feet high, with its roots stretched out and above the ground, like spiders' legs, and the saw grass is seen at the heads of these creeks, and seem to hem and bind their margins, impeding their waters in passing to the bayous of the gulf. Here is the division line between the gulf and the Glades, and here commences the elevation that separates their waters. The water decreases up to two feet at this line, and an increased quantity of mud is found. Some of these creeks are, however, thirty and forty feet wide near their head, ending often abruptly by being choked up by mangrove and other bushes and trees and mud and sand that have accumulated behind them, and over which the fresh water slips languidly through the shrubbery that has sprung up thickly wherever it could find soil sufficient for its growth. The aggregation of numerous sources of this character causes a considerable current of fresh water in the creeks, as well on the ebbtide, where the tide has any influence, as above the effects of the tide. I found in one creek four feet of fresh water and a rocky bottom. I examined these creeks one entire day without finding any passage way with a boat or batteau through into the Glades. That there are such passages, however, is proved by the fact that during the Seminole war, officers of the navy and army made their way in canoes by them from the gulf into the interior of the Glades.

On returning to the salt water bayous, I generally found six and seven feet of salt water on rocky bottom, thinly covered with broken sea shells, and the bottoms of the inlets are also mostly shell. When on our return to the cutter, we stopped for a night in the middle of the main bayou, we could not find a bottom soft enough to allow us to stick down an oar to fasten the boat to. As we proceeded towards the sea, the trees on the islands increased in size, and had few low branches, nor was there much undergrowth. We grounded several times on mud bars, occasioned by the setting out of the fresh water, as the tide was ebbing. The rise and fall of the tide, appeared from the tide marks, at low water, on the shores of the islands near the sea, to be five feet, or more. I was unable to ascertain with certainty, the distance of the waters of the Basin of the Glades, from the heads of these creeks, but it was

conjectured, that the inside western margin was within three or four miles from most of them, and that the land increased gradually in elevation, till it was reached. If not, it might be supposed, that in violent storms and high tides, the pressure of the salt waters of the gulf would force back the lighter fresh waters of the Glades, and that the sea would rush in and occupy the basin. Such overflow has never been heard of. The channels and currents that are at all perceptible, or rather, the flow of the water, in the Glades as noticed in our explorations from the eastern side, mark the most considerable drainage of the Glades, to be on the southwestern side. The innumerable creeks, serving as outlets into the bayous, and through the islands above described, on the southwestern side of the peninsula, above Cape Sable; it is supposed are sufficient to disgorge most of the surplus waters of the Glades, so as to keep them below the level of the rim, on the eastern side; the elevation of which, and the margin on the western side, it is presumed, is about the same, and that they are similar in geological features, except in the particulars mentioned. There is but very little good land, and except such as described, that we discovered on the islands or keys, along the southwestern shore, or in the bayous. There are many flats of mud and sand near to them, and often joining them, which are the resort of various aquatic birds, among which we noticed the white egret, the blue heron, and the roseate spoon-bill. They appeared to care but little for us, and continued regaling themselves, till we approached within a short distance from them, when they flew reluctantly to some adjacent flat. Not far from them we saw several raccoons, feeding on oysters exposed at low tide, but on discovering us, they quickly scampered for some old hollow trees in the vicinity. The mangrove trees are quite thick on the shores of these islands, and at a distance, their clean, close, standing shafts make an interesting and imposing picture. The pleasant appearances they cause is dispelled as you get near the island, and in its stead you find the aspect of everything forbidding, while the innumerable mosquitoes and flies completes your disgust. We saw no traces of any of the islands ever having been inhabited, and it is not likely they will be, for a long time to come. The many delta through these islands, for several miles inland from the gulf, have given the name of "*the Labyrinths*" to this region. It was partially known at an early day to the Spaniards as "*Muspa*," from an Indian village of that name, said to have been located in, or near it. Possibly, the draining of the Ever Glades below the level of any of the outlets of the Glades into the bayous of the *Labyrinths*, may have an effect towards developing some means of artificial improvement, by which this region may be rendered useful, and I doubt not good entrances may be found through some of the many inlets from the gulf, and good harbors within, for vessels of considerable size. There are many fish along this shore.

Before I left the cutter, I had an understanding, that should the wind come on to blow from the E. or S. E. before our return, we should proceed seventy miles coastwise to Sanybel island, whither the Wolcott could run for a harbor.

We came out an inlet five miles S. E. of the cutter, which lay off shore two or three miles. We arrived on board the Wolcott about 5 o'clock P. M., when she was got under way, and we stood N. W. up the coast.

September 30.—Day light, made the land, latitude $26^{\circ} 12'$, longitude $82^{\circ} 10'$ west; land in sight; near Sanybel island. At 1, p. m., Sanybel island was seen from aloft, bearing N. NW.; stood for it. At 7, p. m., came to anchor, the island bearing N. W. by N. four miles.

October 1.—At daylight, got under way, and stood for Sanybel harbor; at 7, a. m., came to anchor in 11 feet water, south end of Sanybel island bearing southeast by south three-quarters of a mile. Punto Rassa, north half east, 2 miles distant. At 8h. 15m., a. m., Mr. Smith and Lieutenant Martin, with four men and a boy, started in the cutter upon an expedition up the Caloosa-Hatchee.

October 5.—At 5, p. m., the expedition returned from the Caloosa-Hatchee, having been absent four days and nights.

Extracts as to the trip up the Caloosa-Hatchee.

October 1.—At 8, a. m., Mr. Smith and Lieutenant Martin started in the boat to ascend the Ever Glades. We proceeded along the Punto Rassa, and having passed into the mouth of the Caloosa-Hatchee, over extended oyster banks, the tide setting out strong, we stopped at Curlew point until mid-day, until the force of the tide

had subsided. The lands we passed, so far, were light and sandy; a bank of shells or sand lying on the shores, while the rest within was apparently broken. The river became sometimes of considerable dimensions, open to the width of two miles, and contracting to points of a quarter of a mile in width. At the distance of seven or eight miles from the mouth, the palmetto began to appear, more particularly on the right bank of the river, which appeared to be lower, for a considerable distance, than the opposite, which showed pine barren of considerable depth, and the land two or three feet above the river. The growth of the right bank was often mangrove, had extensive savannas, and laid often below the water.

We stopped at night near what appeared to have been a fort; about one foot of sand covered with saw palmetto and scattered pines, rested upon a stratum of lime-rock, the top of which was within two feet of the surface of the river. We had ascended this day about 25 miles in a northeast direction.

NOTE.—There were many birds and of great variety, on the oyster banks in and near the mouth of the Caloosa-Hatche, which recently is sometimes called Sanybel bay. An imposing map, or rather a picture of Sanybel island, was lithographed in New York in 1835, by E. Armstrong, the island being laid out into farms, and a town plot designated. A New York company claiming, it is believed under the Hackley or Alagon grant, attempted a settlement there, but it failed. The causes of its failure should not deter practical agriculturists, having experience as to the country, its products, mode of cultivation, &c., from settlements in that region. The name Caloosa-Hatchee is probably derived from that of Caloos, an Indian cacique of early times, and both may be from "*Curlew*," the bird of that name, (taking such name from its peculiar cry) as thousands of these birds are to be seen at the mouth of the river. "*Hatche*" always signifies *river* in the Seminole. The shores on the river below *Curlew point* are higher, and pines and palmettoes are scattered along it, though not so thickly as above the point. We rowed and sailed the first day after we left the point. The influence of the tide was not discovered but a few miles above the river. We stopped at night on the *left* bank. The bank was about three feet high on the river. A stratum of tufa underlies the soil a foot or more below the surface, and disappearing under the water. There were on the ground many valves of the fresh water shell, *Cyrena Caroliniana*. The opposite side of the river here was low savanna. Our general course up was northeast. The current was quite rapid towards the close of the day.

The course of the next day was the same, the width of the river gradually decreasing, the growth becoming larger and more dense, to the distance of about 25 miles more, which completed the journey of to-day. The current, always strong, had increased to a rapidity that, before reaching this point, had arrived at four knots the hour, and for a part of the next day probably surpassed it.

NOTE.—The general course to-day was northeast. The river is narrow in most places; it widens in some, and becomes shallow, i. e. 3 or 4 feet, and is much obstructed by water grass. When it lessens in width, it again deepens. We noticed vast quantities of *mullet*, and that the alligators were feeding on them. There are more pine trees; the oaks are larger; the mangroves disappear; palmettoes are in groves, in low lands back of river. There are a few on the banks, and it seemed as if they were being gradually undermined by the water, and falling into it. We went about 25 miles this day. The current is very rapid where the river is narrow.

The river became narrower as we advanced on the 3d of October. The banks of the river were higher, and the sites of the first forts were four or five feet above water. These sites were upon pine barren ridges, and we found upon places of similar appearance, that the land had been marked, in channels, by the rapid passing of water over them. The nature of the soil was frequently marked by pebbles of limestone and sea-shell of ancient date,

mixed intimately with a small portion of clay, which disappeared under the water, was one foot above it, and four feet of sand rested upon the top, usually covered with a thin pine barren and saw-palmetto.

The pines were occasionally seen together in small numbers, while the oaks, from the day previous, had increased in numbers, and the palmetto formed groves and the edging of savannas. The stream was reduced in width to about fifty yards, and the trees had been locked on the sides for a considerable way, which seemed to make the termination of steamboat navigation during the Seminole war. The depth of the river was found to be from twelve to fourteen feet, and, before the close of the day and the completion of twenty-five miles more of our journey, the water was seen flowing in over the banks, and exposing large tracts of country covered with it. We encamped that night on the last piece of land we were to see until our return.

NOTE.—We passed *several* spots of high cleared ground, where our troops made stockade forts during the Seminole war, all 4 or 5 feet above the water. The steep sides of the river banks showed a formation of sand, some portion of clay and marl, containing pieces of lime rock, madriporæ, and shells of *astrea*, *meandrina*, *chama*, *venus mercatoria*, and others common to that latitude. The surface is generally sand. The saw palmetto and a few pines grow on it. Large live oaks grow in a narrow strip of hammock on each of the rivers in several places, but the distance from the salt water renders them less valuable for ship timber, as none is received that grows more than 20 miles from salt water. The lessening of the width of the stream in many places, had made it necessary for our troops, during the war, to trim up or cut down the trees on the banks, the limbs of which branched across the river and obstructed the passage of steamboats, and when this trimming ceased, it was evidence that steamboats had not been further up, as above stated. Where we stopped this night, we concluded was about 60 miles from the harbor at the mouth of the river.

The river, all the next day, opened over its shores in every direction, and what appeared to be, in a dry season, a savanna or a piece of oak land, was entirely submerged. We followed the river, marked by the rapid flow above it, and at times crossed from point to point through the trees, with a free depth of water. At the end of about five miles we passed into a *Lake*, and stood to the northeast, under sail. The land made a turn to the southward at the entrance into it, and again came up to the eastward. About two miles off, and running northward, it formed a point two or three miles ahead, and then seemed to stretch to the eastward. It was covered with pines, some palmettos in the margin now in the water. The tops of willows, and occasionally those of reeds and grass, showed that this is not always under water. We ran to the northeast about seven miles, and found the depth of water, out of the channel, six feet. It was of less depth on our turning to the eastward, and the channel itself, for half a mile or more, had but six feet. The oak trees on our left were still large, and appeared to form islands with the palmetto, at a dry time, over a considerable region to the northwest. Our course was impeded by dense masses of water lettuce, two or three of which were so small we were enabled to move by the boat; but, finally, a large one effectually impeded our course, as the boat could not be polled through, and for its removal it would have taken considerable time. From the appearance of the way ahead, we had reason to appre-

hend that we might encounter many such masses. In sounding once, we struck the rock about six feet.

NOTE.—The lake abovementioned is lake "FLIRT," named after the chief vessel of Lieut. McLaughlin's command in 1841. Tops of grass appeared over a large portion of the lake, just above its surface, though the water was 6 feet deep. In the dry seasons, I am informed, this lake is quite a dry *prairie*, except portions of it, and the channel way of the river through its middle. "Fort Thompson" is just below this lake, on the left bank of the river, descending. It is about eighty miles by the river to the Gulf. The water lettuce is the *Pistia stratiotes*, described by Bartram, as in the St. John's river, a plant with long hairy roots, which he says is first produced on, or close to the shore in eddy water, and is forced from its hold by floods or strong winds. We did not see any in the Glades, and supposed these masses to have come down from the northern streams through lake Okechobee.

In returning, the boat was passed up to the piles that had formed on Fort Thompson, standing at the head of the river, and they were found six feet deep in the water. There appeared to be not a dry spot for miles around, and the water was flowing in every direction to the river, with great rapidity, through the woods. From the appearance of the trees in descending the river, the water appeared to have fallen four or five inches in twenty-four hours. Many of the trees were still wet up the trunk, and, from the lodged material in the limbs, the water appeared to have stood, but a little time back, full six feet higher than at present. These marks held good for the whole distance, when we returned from, about noon to-day, the distance of about twenty-five miles from the head of the river. We noticed, in our course, some individual trees of the pecan nut, gum alimi, and a yellow plum of peculiar flavor.

The river was full of fish, the lower part of it with mullet in great numbers, and through the whole of it were alligators in great number. The waters were thick and tasting of the roots of trees, very unlike that of the Ever Glades. On the 5th, we passed down the river about sixty miles, and arrived on board at 5 p. m.

NOTE.—The region tributary to the Caloosa-Hatchee, and which we sought to explore, but were prevented by the extraordinary high waters, is an area nearly equal to that of the Ever Glades. It is of pine barren, prairie, or savannas and low swamps, the whole region having lime rock near to, or upon the surface. In July 1835, (vide Williams Florida, pp. 289 to 300,) a party ascended this river, and they described the country thirty miles below the first lake, (FLIRT,) as often spreading into savannas, the lands rich, and the banks of the river varying in height above the water, from five to fifteen feet. We saw no banks over five feet high, but the waters on our visit were very full. On our visit the waters came in copious streams over the banks of the river, and fell into it, and created a strong current. A few miles to the S. E. of Lake Flirt, is Lake Hiokpochee, (or *little prairie*), and which is on the northwestern margin of the Glades, and may in fact be regarded as part of them. The river Caloosa-Hatchee continues through this last lake to the Okechobee, with which it is connected by low lands, and dense swamps or jungles, which in dry seasons are not overflowed. The western shore of Lake Okechobee, is less than one hundred miles from the gulf, and the eastern shore is less than half that distance from the Atlantic. Lake Okechobee is said to be very deep. The canal commenced by the Spaniards, to connect the Caloosa-Hatchee with Lake Okechobee, is a short distance north of Lake Flirt, and it is probably the most eligible location for the similar work now proposed. The engraved maps of Florida, published many years ago, indicate its course, and their indications are pursued on the map annexed. It will probably be found that other canals or drains to this river, besides this one, must be made; and other improvements in the river, and on its banks. On the eastern side, like canals to the Locha-Hatchee, and perhaps, to branches of the San Lucie, will also be necessary.

The big cypress swamp, or Atsee-Nahooffa, is south of the Caloosa-Hatchee, and lies between the gulf and the western margin of the Glades, connecting however, in various places with the Glades. Most of the rivers north of Cape Sable, above the *Labyrinths*, and south of the Caloosa-Hatchee, have their sources in this extensive swamp. It must be drained by opening new drains, and deepening, widening, and removing the obstructions in the present

outlets from it into the river. The big cypress, is perhaps fifty miles long, and from twenty to thirty miles wide.

The Halpatioke swamp is situate on the eastern side of Okechobee, and is equal in area to the Atsee-Nahooffa, though not so wide, and it is the source of the different branches of the San Lucie, and of the Locha-Hatchee. One branch of the latter river, in times of high water, is connected with the northeast part of the Ever Glades, and with the southwest corner of Lake Okechobee, in a manner very like the connection before described of that lake, and of the Glades, with the Caloosa-Hatchee. In dry times, vast portions of it become *prairie*, that in wet seasons are submerged from one and a half to two, and sometimes three feet. The entire country, south of an east and west line across the peninsula, near to the most northern point of Lake Okechobee, will be benefitted by the proposed improvements, and without them, will remain comparatively worthless to the United States, or to the State of Florida.

October 6.—At 6 45 a. m., got under weigh and stood out of the harbor; at 7 45, rounded Sanybel Island shoal and stood to leeward and westward, luffing to the northward, as we cleared the land. * * * * *

October 8.—At 10 15 a. m., came to anchor at St. Mark's light-house, north $1\frac{1}{2}$ miles distant. Sent a boat to St. Mark's with an officer to land Buckingham Smith, esq. Boat returned at 6 p. m.; got under weigh and stood to the southward, under all sail. * *

